

PROTEIN	CLUSTER	SPECIES	ACCESSION NUMBER
Alr	40	<i>Bacillus subtilis</i>	WP_003234284.1
		<i>Clostridioides difficile</i>	WP_133148152.1
		<i>Clostridium acetireducens</i>	WP_070109326.1
		<i>Clostridium acetobutylicum</i> *	WP_010963814.1
		<i>Clostridium argentinense</i>	WP_039636837.1
		<i>Clostridium beijerinckii</i> *	WP_041896658.1
		<i>Clostridium botulinum</i> *	WP_003362634.1
		<i>Clostridium butyricum</i> *	WP_035765520.1
		<i>Clostridium carnis</i> *	WP_125149249.1
		<i>Clostridium chromiireducens</i>	WP_079438647.1
		<i>Clostridium coskatii</i> *	WP_013239842.1
		<i>Clostridium felsineum</i> *	WP_077893971.1
		<i>Clostridium gasigenes</i>	WP_089967512.1
		<i>Clostridium indicum</i>	WP_117418366.1
		<i>Clostridium kluyveri</i>	WP_073540554.1
		<i>Clostridium ljungdahlii</i>	WP_063554349.1
		<i>Clostridium luticellari</i>	WP_106008173.1
		<i>Clostridium magnum</i>	WP_066616893.1
		<i>Clostridium neonatale</i> *	WP_058295526.1
		<i>Clostridium oryzae</i> *	WP_079421622.1
		<i>Clostridium pasteurianum</i> *	WP_003442920.1
		<i>Clostridium perfringens</i>	WP_002329725.1
		<i>Clostridium phoceensis</i>	WP_050623799.1
		<i>Clostridium putrefaciens</i> *	WP_172556281.1
		<i>Clostridium roseum</i> *	WP_077834313.1
		<i>Clostridium saccharobutylicum</i> *	WP_077863903.1
		<i>Clostridium sordellii</i>	WP_156987328.1
		<i>Clostridium sporogenes</i>	WP_163208955.1
		<i>Clostridium tagluense</i> *	WP_125005262.1
		<i>Clostridium tyrobutyricum</i>	WP_017753271.1
<i>Clostridium vincentii</i> *	WP_055257058.1		
BAX60_21285	49	<i>Bacillus subtilis</i>	WP_072566763.1
		<i>Clostridioides difficile</i>	MBG0219982.1
		<i>Clostridium beijerinckii</i>	WP_173715391.1
		<i>Clostridium botulinum</i>	WP_003400272.1
		<i>Clostridium butyricum</i>	WP_027636923.1

		<i>Clostridium cadaveris</i>	WP_099335807.1
		<i>Clostridium carnis</i>	WP_125148613.1
		<i>Clostridium fallax</i>	WP_072894005.1
		<i>Clostridium jeddahense</i>	WP_195465370.1
		<i>Clostridium massiliodielmoense</i>	WP_085829386.1
		<i>Clostridium merdae</i>	WP_085832864.1
		<i>Clostridium minihomine</i>	WP_101698505.1
		<i>Clostridium neonatale</i>	WP_159136389.1
		<i>Clostridium perfringens</i>	WP_142419044.1
		<i>Clostridium puniceum</i>	WP_077845635.1
		<i>Clostridium sachharobutylicum</i>	WP_077867600.1
		<i>Clostridium sordellii</i>	WP_054631865.1
		<i>Clostridium sporogenes</i>	WP_163256371.1
		<i>Clostridium tetani</i>	WP_199798727.1
<b>BclA</b>	<b>53</b>	<b><i>Bacillus cereus</i></b>	<b>WP_042515567.1</b>
		<i>Clostridioides difficile*</i>	WP_074073572.1
		<i>Clostridium arbusti</i>	WP_010236691.1
		<i>Clostridium pasteurianum</i>	WP_076719089.1
<b>BclB</b>	<b>53</b>	<b><i>Bacillus cereus</i></b>	<b>WP_076537677.1</b>
		<i>Clostridioides difficile</i>	HAU5159149.1
		<i>Clostridium baratii</i>	KJU71802.1
		<i>Clostridium jeddahense</i>	WP_081759628.1
<b>BetA</b>	<b>12</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003246153.1</b>
		<i>Clostridium aceticum</i>	WP_044823081.1
		<i>Clostridium acetireducens</i>	WP_070110200.1
		<i>Clostridium acetobutylicum</i>	WP_034582527.1
		<i>Clostridium acidisoli</i>	WP_084117746.1
		<i>Clostridium akagii</i>	WP_026882081.1
		<i>Clostridium algidicarnis</i>	WP_104409359.1
		<i>Clostridium amazonitimonense</i>	WP_032121288.1
		<i>Clostridium amylolyticum</i>	WP_073003771.1
		<i>Clostridium arbusti</i>	WP_010236170.1
		<i>Clostridium aurantibutyricum</i>	WP_077834474.1
		<i>Clostridium autoethanogenum</i>	WP_013236906.1
		<i>Clostridium baratii</i>	WP_077229735.1
		<i>Clostridium beijerinckii</i>	AWK50655.1
		<i>Clostridium bornimense</i>	WP_044039260.1
		<i>Clostridium botulinum</i>	NFD76883.1

<i>Clostridium bovifaecis</i>	QGU94117.1
<i>Clostridium butyricum</i>	MBE6072188.1
<i>Clostridium cadaveris</i>	WP_168972423.1
<i>Clostridium carboxidivorans</i>	WP_048030415.1
<i>Clostridium carnis</i>	WP_125147983.1
<i>Clostridium cavendishii</i>	WP_072992932.1
<i>Clostridium celatum</i>	WP_005210090.1
<i>Clostridium cellulovorans</i>	WP_010075872.1
<i>Clostridium chauvoei</i>	WP_021876614.1
<i>Clostridium chromiireducens</i>	WP_160358958.1
<i>Clostridium cochlearium</i>	NMA58896.1
<i>Clostridium colicanis</i>	WP_061858026.1
<i>Clostridium collagenovorans</i>	WP_072832071.1
<i>Clostridium combesii</i>	WP_099839501.1
<i>Clostridium coskatii</i>	WP_013236906.1
<i>Clostridium cuniculi</i>	WP_195419000.1
<i>Clostridium cylindrosporum</i>	WP_048569552.1
<i>Clostridioides difficile</i>	EGT5221452.1
<i>Clostridium diolis</i>	WP_039772942.1
<i>Clostridium disporicum</i>	WP_055264721.1
<i>Clostridium drakei</i>	WP_032078595.1
<i>Clostridium fallax</i>	WP_072895784.1
<i>Clostridium felsineum</i>	WP_077834474.1
<i>Clostridium frigidicarnis</i>	WP_090038974.1
<i>Clostridium gasigenes</i>	WP_089968292.1
<i>Clostridium hydrogeniformans</i>	WP_027632631.1
<i>Clostridium ihumii</i>	WP_081771004.1
<i>Clostridium intestinale</i>	WP_021800465.1
<i>Clostridium isatidis</i>	WP_119866197.1
<i>Clostridium jeddahense</i>	WP_194955864.1
<i>Clostridium khuyveri</i>	WP_012104038.1
<i>Clostridium liquoris</i>	WP_106062485.1
<i>Clostridium ljungdahlii</i>	WP_013236906.1
<i>Clostridium lundense</i>	MBE6066329.1
<i>Clostridium luticellari</i>	WP_106010770.1
<i>Clostridium magnum</i>	WP_066627391.1
<i>Clostridioides manganotii</i>	WP_027701353.1
<i>Clostridium mediterraneense</i>	WP_066871757.1

<i>Clostridium merdae</i>	WP_085832215.1
<i>Clostridium minihomine</i>	WP_101698467.1
<i>Clostridium neonatale</i>	WP_058293679.1
<i>Clostridium niameyense</i>	WP_163249445.1
<i>Clostridium nigeriense</i>	WP_066895810.1
<i>Clostridium oryzae</i>	WP_079422609.1
<i>Clostridium paraputrificum</i>	WP_099328887.1
<i>Clostridium pasteurianum</i>	WP_066021998.1
<i>Clostridium peptidivorans</i>	WP_097026603.1
<i>Clostridium perfringens</i>	WP_115613713.1
<i>Clostridium polynesiense</i>	WP_040210606.1
<i>Clostridium puniceum</i>	WP_077849952.1
<i>Clostridium putrefaciens</i>	WP_115640697.1
<i>Clostridium ragsdalei</i>	WP_065078952.1
<i>Clostridium roseum</i>	WP_077834474.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077360297.1
<i>Clostridium sachharobutylicum</i>	WP_022743808.1
<i>Clostridium sartagofforme</i>	WP_136007993.1
<i>Clostridium saudicense</i>	WP_195949427.1
<i>Clostridium scatologenes</i>	WP_029159240.1
<i>Clostridium septicum</i>	WP_066679203.1
<i>Clostridium sordellii</i>	WP_057562144.1
<i>Clostridium sporogenes</i>	WP_058007784.1
<i>Clostridium sulfidigenes</i>	MBE6060344.1
<i>Clostridium taeniosporum</i>	WP_069678748.1
<i>Clostridium tarantellae</i>	MPQ45064.1
<i>Clostridium tepidum</i>	WP_078023333.1
<i>Clostridium tertium</i>	WP_008676588.1
<i>Clostridium tetani</i>	WP_129133325.1
<i>Clostridium tetanomorphum</i>	WP_035145112.1
<i>Clostridium thermanum</i>	WP_163192874.1
<i>Clostridium thermobutyricum</i>	WP_080022088.1
<i>Clostridium thermopalmarium</i>	MBE6044052.1
<i>Clostridium thiosulfatireducens</i>	WP_024619993.1
<i>Clostridium tyrobutyricum</i>	WP_017751752.1
<i>Clostridium uliginosum</i>	WP_090088518.1
<i>Clostridium ventriculi</i>	WP_055257956.1
<i>Clostridium vincentii</i>	WP_106059205.1

<b>C7U56_00100</b>	<b>55</b>	<b><i>Clostridium fessum</i></b> <i>Clostridium indicum</i> <i>Clostridium jeddahense</i> <i>Clostridium merdae</i> <i>Clostridium minihomine</i> <i>Clostridium transplantifaecale</i>	<b>WP_107000381.1</b> WP_117419452.1 WP_169008848.1 WP_143750850.1 WP_101698404.1 WP_164516754.1
<b>CD630_05960</b>	<b>34</b>	<b><i>Clostridium aceticum</i></b> <i>Clostridioides difficile</i> <i>Clostridioides mangenotii</i> <i>Clostridium acidisoli</i> <i>Clostridium akagii</i> <i>Clostridium arbusti</i> <i>Clostridium autoethanogenum</i> <i>Clostridium coskatii</i> <i>Clostridium cuniculi</i> <i>Clostridium formicaceticum</i> <i>Clostridium ljungdahlii</i> <i>Clostridium pasteurianum</i> <i>Clostridium sordellii</i> <i>Clostridium thiosulfatireducens</i>	<b>WP_044823423.1</b> WP_107594616.1 WP_027702379.1 WP_084117170.1 WP_035795494.1 WP_010232831.1 AGY75465.1 OAA94630.1 WP_021432202.1 WP_081561955.1 ADK16386.1 WP_015617603.1 WP_055339127.1 WP_021429260.1
<b>CD630_14330</b>	<b>22</b>	<b><i>Clostridioides difficile</i></b> <i>Clostridium aceticum</i> <i>Clostridium acidisoli</i> <i>Clostridium akagii</i> <i>Clostridium algidicarnis</i> <i>Clostridium amazonitimonense</i> <i>Clostridium amylyoticum</i> <i>Clostridium arbusti</i> <i>Clostridium argentinense</i> <i>Clostridium baratii</i> <i>Clostridium beijerinckii</i> <i>Clostridium bornimense</i> <i>Clostridium botulinum</i> <i>Clostridium bovisfaecis</i> <i>Clostridium butyricum</i> <i>Clostridium carnis</i> <i>Clostridium cavendishii</i> <i>Clostridium chauvoei</i>	<b>WP_011861211.1</b> WP_044824375.1 SMC27519.1 WP_026881843.1 WP_185158222.1 WP_032120886.1 WP_083600044.1 WP_010232826.1 WP_039635833.1 WP_039314086.1 WP_196244918.1 WP_044037204.1 WP_049178678.1 QGU94513.1 MBE6070608.1 WP_058296425.1 WP_072988053.1 CDG00840.1

<i>Clostridium combesii</i>	WP_099838685.1
<i>Clostridium cuniculi</i>	WP_035117826.1
<i>Clostridium cylindrosporum</i>	WP_048571551.1
<i>Clostridium difficile</i>	WP_011861211.1
<i>Clostridium diolis</i>	WP_087703113.1
<i>Clostridium estertheticum</i>	WP_164957848.1
<i>Clostridium formicaceticum</i>	WP_070964182.1
<i>Clostridium frigidicarnis</i>	WP_177199278.1
<i>Clostridium gasigenes</i>	WP_175490820.1
<i>Clostridium hydrogeniformans</i>	WP_027632422.1
<i>Clostridium indicum</i>	WP_117420121.1
<i>Clostridium intestinale</i>	WP_021800776.1
<i>Clostridium isatidis</i>	WP_119865876.1
<i>Clostridium jeddahense</i>	WP_195200442.1
<i>Clostridium kluyveri</i>	WP_011988932.1
<i>Clostridium lundense</i>	WP_027624163.1
<i>Clostridium magnum</i>	WP_066626483.1
<i>Clostridioides mangenotii</i>	WP_024620564.1
<i>Clostridium mediterraneense</i>	WP_066874115.1
<i>Clostridium merdae</i>	WP_085833468.1
<i>Clostridium minihomine</i>	WP_101698012.1
<i>Clostridium neonatale</i>	WP_058296425.1
<i>Clostridium nigeriense</i>	WP_066889457.1
<i>Clostridium oryzae</i>	WP_079421916.1
<i>Clostridium paraputrificum</i>	WP_027097907.1
<i>Clostridium pasteurianum</i>	WP_015617600.1
<i>Clostridium perfringens</i>	WP_002329500.1
<i>Clostridium puniceum</i>	WP_077849560.1
<i>Clostridium putrefaciens</i>	WP_115641670.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077364622.1
<i>Clostridium sachharobutylicum</i>	WP_077864449.1
<i>Clostridium sartagoforme</i>	WP_016206966.1
<i>Clostridium saudicense</i>	WP_042395912.1
<i>Clostridium senegalense</i>	WP_061995248.1
<i>Clostridium septicum</i>	WP_066676233.1
<i>Clostridium sordellii</i>	WP_057544744.1
<i>Clostridium sporogenes</i>	WP_163205809.1
<i>Clostridium taeniosporum</i>	WP_069680622.1

		<i>Clostridium tagluense</i>	WP_125002130.1
		<i>Clostridium tepidum</i>	WP_078022709.1
		<i>Clostridium tertium</i>	WP_097034087.1
		<i>Clostridium tetani</i>	WP_035141601.1
		<i>Clostridium tetanomorphum</i>	WP_035144116.1
		<i>Clostridium therrmarum</i>	WP_139904750.1
		<i>Clostridium thiosulfatireducens</i>	WP_025162231.1
		<i>Clostridium transplantifaecale</i>	WP_125142419.1
		<i>Clostridium tunisiense</i>	WP_017416858.1
		<i>Clostridium ventriculi</i>	WP_055258958.1
<b>CD630_15110</b>	<b>18</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_003439363.1</b>
		<i>Clostridioides mangenotii</i>	WP_024620305.1
		<i>Clostridium acetobutylicum</i>	WP_010966720.1
		<i>Clostridium acidisoli</i>	WP_084114360.1
		<i>Clostridium akagii</i>	WP_026884946.1
		<i>Clostridium algidicarnis</i>	WP_185161848.1
		<i>Clostridium amazonitimonense</i>	WP_032120862.1
		<i>Clostridium amylyoticum</i>	WP_073007374.1
		<i>Clostridium arbusti</i>	WP_010233542.1
		<i>Clostridium argentinense</i>	WP_039629860.1
		<i>Clostridium aurantibutyricum</i>	WP_077851776.1
		<i>Clostridium autoethanogenum</i>	WP_013239346.1
		<i>Clostridium baratii</i>	WP_045726202.1
		<i>Clostridium beijerinckii</i>	WP_077842662.1
		<i>Clostridium bornimense</i>	WP_044040175.1
		<i>Clostridium botulinum</i>	NFT06487.1
		<i>Clostridium bovisfaecis</i>	QGU94479.1
		<i>Clostridium carboxidivorans</i>	WP_007059342.1
		<i>Clostridium carnis</i>	WP_058294815.1
		<i>Clostridium cavendishii</i>	WP_072985065.1
		<i>Clostridium celatum</i>	WP_005215450.1
		<i>Clostridium cellulovorans</i>	WP_010075906.1
		<i>Clostridium chromiireducens</i>	WP_160359312.1
		<i>Clostridium colicanis</i>	WP_061857569.1
		<i>Clostridium combesii</i>	WP_099839071.1
		<i>Clostridium coskatii</i>	WP_063601926.1
		<i>Clostridium cuniculi</i>	WP_195417441.1
		<i>Clostridium cylindrosporum</i>	WP_048571425.1

<i>Clostridium difficile</i>	WP_003439363.1
<i>Clostridium diolis</i>	WP_105411637.1
<i>Clostridium disporicum</i>	CUP05599.1
<i>Clostridium estertheticum</i>	WP_164956329.1
<i>Clostridium felsineum</i>	WP_077832879.1
<i>Clostridium formicaceticum</i>	WP_070971210.1
<i>Clostridium frigidicarnis</i>	WP_090037718.1
<i>Clostridium gasigenes</i>	WP_167865381.1
<i>Clostridium hydrogeniformans</i>	WP_027633011.1
<i>Clostridium indicum</i>	WP_117417071.1
<i>Clostridium isatidis</i>	WP_119864938.1
<i>Clostridium kluyveri</i>	WP_073537632.1
<i>Clostridium ljungdahlii</i>	WP_013239346.1
<i>Clostridium lundense</i>	WP_027626392.1
<i>Clostridium luticellari</i>	WP_106010488.1
<i>Clostridium mediterraneense</i>	WP_066875259.1
<i>Clostridium neonatale</i>	WP_058294815.1
<i>Clostridium oryzae</i>	WP_169911726.1
<i>Clostridium paraputrificum</i>	WP_147589377.1
<i>Clostridium pasteurianum</i>	WP_003448089.1
<i>Clostridium peptidivorans</i>	WP_097025619.1
<i>Clostridium perfringens</i>	WP_008677088.1
<i>Clostridium polynesiense</i>	WP_040212873.1
<i>Clostridium puniceum</i>	WP_077849041.1
<i>Clostridium putrefaciens</i>	WP_115641513.1
<i>Clostridium roseum</i>	WP_077832879.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077366267.1
<i>Clostridium sachharobutylicum</i>	WP_022746254.1
<i>Clostridium sartagoforme</i>	WP_136006279.1
<i>Clostridium saudicense</i>	WP_195953301.1
<i>Clostridium senegalense</i>	WP_061994610.1
<i>Clostridium sordellii</i>	WP_021129024.1
<i>Clostridium sporogenes</i>	WP_043031152.1
<i>Clostridium sulfidigenes</i>	MBE6059422.1
<i>Clostridium tagluense</i>	WP_125001552.1
<i>Clostridium tertium</i>	WP_008677088.1
<i>Clostridium tetani</i>	WP_035109051.1
<i>Clostridium thermobutyricum</i>	WP_195972746.1



		<i>Clostridium thermopalmarium</i>	WP_061857569.1
		<i>Clostridium thiosulfatireducens</i>	WP_150842173.1
		<i>Clostridium tunisiense</i>	WP_017415903.1
		<i>Clostridium uliginosum</i>	WP_090093684.1
<b>CD630_16130</b>	<b>66</b>	<b><i>Clostridioides difficile</i></b>	<b>CAJ68478.1</b>
<b>CdeA</b>	<b>38</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_009902537.1</b>
		<i>Clostridium aceticum</i>	WP_044824682.1
		<i>Clostridium amylolyticum</i>	WP_073005491.1
		<i>Clostridium baratii</i>	WP_054199470.1
		<i>Clostridium cavendishii</i>	WP_072985275.1
		<i>Clostridium celatum</i>	WP_040419772.1
		<i>Clostridium chauvoei</i>	WP_161493120.1
		<i>Clostridium combesii</i>	WP_099837811.1
		<i>Clostridium disporicum</i>	WP_055263801.1
		<i>Clostridium estertheticum</i>	WP_165414179.1
		<i>Clostridium fallax</i>	WP_072892318.1
		<i>Clostridium fessum</i>	WP_107000098.1
		<i>Clostridium formicaceticum</i>	WP_081562037.1
		<i>Clostridium indicum</i>	WP_117416426.1
		<i>Clostridium intestinale</i>	WP_181603368.1
		<i>Clostridium nigeriense</i>	WP_066889422.1
		<i>Clostridium paraputrificum</i>	WP_055183476.1
		<i>Clostridium polynesiense</i>	WP_052447524.1
		<i>Clostridium sartagoforme</i>	MBE6054987.1
		<i>Clostridium saudicense</i>	WP_042394929.1
		<i>Clostridium senegalense</i>	WP_010293373.1
		<i>Clostridium septicum</i>	WP_162925981.1
		<i>Clostridium sordellii</i>	WP_077067291.1
		<i>Clostridium sporogenes</i>	WP_042384841.1
		<i>Clostridium sulfidigenes</i>	MBE6059130.1
		<i>Clostridium taeniosporum</i>	WP_069681283.1
		<i>Clostridium tarantellae</i>	WP_152889734.1
		<i>Clostridium tepidum</i>	WP_078054482.1
		<i>Clostridium tetanomorphum</i>	WP_173680221.1
		<i>Clostridium thermobutyricum</i>	WP_080024179.1
		<i>Clostridium tunisiense</i>	WP_017417088.1
		<i>Clostridium ventriculi</i>	WP_112364923.1
<b>CdeC</b>	<b>56</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_003418933.1</b>

		<i>Clostridioides manganotii</i>	WP_024622166.1
		<i>Clostridium cuniculi</i>	WP_052169067.1
		<i>Clostridium sordellii</i>	WP_057585739.1
		<i>thiosulfatireducens</i>	WP_150842136.1
<b>CdeM</b>	<b>65</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_003436550.1</b>
<b>CgeA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003230824.1</b>
<b>CgeB</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_004399421.1</b>
<b>CgeC</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003230826.1</b>
<b>CgeD</b>	<b>58</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003230828.1</b>
		<i>Clostridium acetobutylicum</i>	WP_010965643.1
		<i>Clostridium intestinale</i>	WP_181601049.1
		<i>Clostridium magnum</i>	WP_066618057.1
		<i>Clostridium polynesiense</i>	WP_040213532.1
<b>CgeE</b>	<b>61</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003230830.1</b>
		<i>Clostridium sulfidigenes</i>	WP_035131816.1
		<i>Clostridium tagluense</i>	WP_124998524.1
<b>CotA</b>	<b>39</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243170.1</b>
		<i>Clostridium acidisoli</i>	WP_084116261.1
		<i>Clostridium akagii</i>	WP_026881169.1
		<i>Clostridium amylolyticum</i>	SHI57045.1
		<i>Clostridium argentinense</i>	WP_145953092.1
		<i>Clostridium beijerinckii</i>	WP_185687150.1
		<i>Clostridium botulinum</i>	WP_039256919.1
		<i>Clostridium butyricum</i>	MBE6072234.1
		<i>Clostridium carboxidivorans</i>	WP_007059121.1
		<i>Clostridium cuniculi</i>	WP_195964862.1
		<i>Clostridium disporicum</i>	WP_055267756.1
		<i>Clostridium drakei</i>	WP_032076976.1
		<i>Clostridium haemolyticum</i>	WP_039229823.1
		<i>Clostridium homopropionicum</i>	WP_074782805.1
		<i>Clostridium hydrogeniformans</i>	WP_051623582.1
		<i>Clostridium intestinale</i>	ERK29178.1
		<i>Clostridium isatidis</i>	WP_119866591.1
		<i>Clostridium lundense</i>	MBE6069389.1
		<i>Clostridium mediterraneense</i>	WP_084748425.1
		<i>Clostridium neonatale</i>	SUQ42863.1
		<i>Clostridium novyi</i>	WP_039217212.1

		<i>Clostridium oryzae</i>	WP_079426681.1
		<i>Clostridium pasteurianum</i>	WP_015613478.1
		<i>Clostridium peptidivorans</i>	WP_097026786.1
		<i>Clostridium perfringens</i>	WP_185955575.1
		<i>Clostridium polynesiense</i>	WP_040211170.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394464.1
		<i>Clostridium sartagoforme</i>	WP_016206059.1
		<i>Clostridium scatologenes</i>	WP_029163780.1
		<i>Clostridium sporogenes</i>	WP_072586868.1
		<i>Clostridium tertium</i>	WP_195959528.1
		<i>Clostridium tyrobutyricum</i>	WP_058953131.1
<b>CotB</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003242882.1</b>
<b>CotC</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003231636.1</b>
<b>CotD</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_010886551.1</b>
<b>CotE</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003221022.1</b>
<b>CotF</b>	<b>32</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243364.1</b>
		<i>Clostridium acetobutylicum</i> *	WP_010965971.1
		<i>Clostridium beijerinckii</i> *	WP_017208798.1
		<i>Clostridium felsineum</i> *	OOL86766.1
		<i>Clostridium magnum</i> *	KZL91781.1
		<i>Clostridium oryzae</i> *	WP_079427481.1
		<i>Clostridium ragsdalei</i> *	WP_065078686.1
		<i>Clostridium roseum</i> *	WP_077834138.1
		<i>Clostridium tagluense</i> *	GCD08494.1
<b>CotG</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_010886627.1</b>
<b>CotH</b>	<b>51</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003227854.1</b>
		<i>Clostridioides difficile</i> *	WP_011861071.1
		<i>Clostridium aceticum</i>	WP_044824613.1
		<i>Clostridium cochlearium</i> *	WP_111921568.1
		<i>Clostridium cylindrosporium</i> *	WP_053083270.1
		<i>Clostridium disporicum</i> *	WP_148315733.1
		<i>Clostridium formicaceticum</i>	WP_070965365.1
		<i>Clostridium grantii</i>	WP_073339351.1
		<i>Clostridium homopropionicum</i>	WP_052220404.1
		<i>Clostridium lundense</i>	MBE6076163.1
		<i>Clostridium sporogenes</i> *	WP_033059372.1
		<i>Clostridium vincentii</i> *	WP_106058842.1

CotI	2	<b>Clostridium ljungdahlii</b>	<b>WP_010886600.1</b>
		<i>Clostridium acetireducens</i>	WP_070110177.1
		<i>Clostridium acetobutylicum</i>	WP_034582541.1
		<i>Clostridium acidisoli</i>	WP_084117655.1
		<i>Clostridium akagii</i>	WP_026883318.1
		<i>Clostridium algidicarnis</i>	WP_029452689.1
		<i>Clostridium amazonitimonense</i>	WP_032122769.1
		<i>Clostridium amylolyticum</i>	WP_073003759.1
		<i>Clostridium arbusti</i>	WP_010235325.1
		<i>Clostridium argentinense</i>	WP_039635124.1
		<i>Clostridium aurantibutyricum</i>	WP_077834465.1
		<i>Clostridium autoethanogenum</i>	WP_013236895.1
		<i>Clostridium baratii</i>	WP_045723888.1
		<i>Clostridium beijerinckii</i>	WP_026887493.1
		<i>Clostridium bornimense</i>	WP_044039269.1
		<i>Clostridium botulinum</i>	WP_061316620.1
		<i>Clostridium bovisfaecis</i>	QGU94106.1
		<i>Clostridium butyricum</i>	MBE6072175.1
		<i>Clostridium cadaveris</i>	WP_027638674.1
		<i>Clostridium carboxidivorans</i>	WP_007063777.1
		<i>Clostridium carnis</i>	WP_125147980.1
		<i>Clostridium cavendishii</i>	WP_072992972.1
		<i>Clostridium celatum</i>	WP_195245259.1
		<i>Clostridium cellulovorans</i>	WP_013291831.1
		<i>Clostridium chauvoei</i>	WP_021876626.1
		<i>Clostridium chromiireducens</i>	WP_079438934.1
		<i>Clostridium cochlearium</i>	WP_169712346.1
		<i>Clostridium colicanis</i>	WP_061858037.1
		<i>Clostridium collagenovorans</i>	WP_072831439.1
		<i>Clostridium combesii</i>	WP_003404981.1
		<i>Clostridium coskatii</i>	WP_063601728.1
		<i>Clostridium cuniculi</i>	WP_133014102.1
		<i>Clostridium cylindrosporum</i>	WP_048571078.1
		<i>Clostridium diolis</i>	WP_011967736.1
		<i>Clostridium disporicum</i>	WP_055265685.1
		<i>Clostridium drakei</i>	WP_032078605.1
		<i>Clostridium estertheticum</i>	WP_164956333.1
		<i>Clostridium fallax</i>	WP_072895750.1

<i>Clostridium felsineum</i>	WP_077834465.1
<i>Clostridium frigidicarnis</i>	WP_090041899.1
<i>Clostridium gasigenes</i>	WP_167865805.1
<i>Clostridium grantii</i>	WP_073337685.1
<i>Clostridium haemolyticum</i>	WP_039217501.1
<i>Clostridium homopropionicum</i>	WP_052222742.1
<i>Clostridium hydrogeniformans</i>	WP_027632645.1
<i>Clostridium ihumii</i>	WP_034438265.1
<i>Clostridium intestinale</i>	WP_181601449.1
<i>Clostridium isatidis</i>	WP_119866212.1
<i>Clostridium liquoris</i>	WP_106062477.1
<i>Clostridium ljungdahlii</i>	WP_013236895.1
<i>Clostridium lundense</i>	MBE6078246.1
<i>Clostridium luticellari</i>	WP_106010071.1
<i>Clostridium magnum</i>	WP_066627359.1
<i>Clostridium massiliodielmoense</i>	WP_085829195.1
<i>Clostridium mediterraneense</i>	WP_066871732.1
<i>Clostridium neonatale</i>	WP_058293665.1
<i>Clostridium niameyense</i>	WP_050608352.1
<i>Clostridium novyi</i>	WP_011723015.1
<i>Clostridium oryzae</i>	OPJ63382.1
<i>Clostridium paraputrificum</i>	WP_049179959.1
<i>Clostridium pasteurianum</i>	WP_015613697.1
<i>Clostridium peptidivorans</i>	WP_097026614.1
<i>Clostridium perfringens</i>	PWX08900.1
<i>Clostridium polynesiense</i>	WP_040211391.1
<i>Clostridium puniceum</i>	WP_077849758.1
<i>Clostridium putrefaciens</i>	WP_115640686.1
<i>Clostridium ragsdalei</i>	WP_065078942.1
<i>Clostridium roseum</i>	WP_077834465.1
<i>Clostridium saccharobutylicum*</i>	WP_022743794.1
<i>Clostridium sartagoforme</i>	MBE6054341.1
<i>Clostridium saudicense</i>	WP_042399435.1
<i>Clostridium scatologenes</i>	WP_029162457.1
<i>Clostridium senegalense</i>	WP_010293844.1
<i>Clostridium septicum</i>	WP_066676563.1
<i>Clostridium sporogenes</i>	APH14823.1
<i>Clostridium sulfidigenes</i>	WP_035134335.1

		<i>Clostridium taeniosporum</i>	WP_069678735.1
		<i>Clostridium tagluense</i>	WP_124999919.1
		<i>Clostridium tarantellae</i>	WP_152888136.1
		<i>Clostridium tepidiprofundum</i>	WP_066823759.1
		<i>Clostridium tepidum</i>	WP_078023316.1
		<i>Clostridium tertium</i>	WP_008676549.1
		<i>Clostridium tetani</i>	WP_035110925.1
		<i>Clostridium tetanomorphum</i>	WP_035145127.1
		<i>Clostridium thermarum</i>	WP_163192889.1
		<i>Clostridium thermobutyricum</i>	WP_195972788.1
		<i>Clostridium thermopalmarium</i>	WP_061858037.1
		<i>Clostridium thiosulfatireducens</i>	WP_150846277.1
		<i>Clostridium tunisiense</i>	WP_017413556.1
		<i>Clostridium tyrobutyricum</i>	WP_017751742.1
		<i>Clostridium uliginosum</i>	WP_090088542.1
		<i>Clostridium ventriculi</i>	WP_112365704.1
		<i>Clostridium vincentii</i>	WP_106059219.1
<b>CotJA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003219489.1</b>
<b>CotJB</b>	<b>17</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003219491.1</b>
		<i>Clostridioides difficile</i>	WP_021385274.1
		<i>Clostridioides mangenotii</i>	WP_024620415.1
		<i>Clostridium aceticum</i>	WP_044823422.1
		<i>Clostridium acetireducens</i>	WP_070110670.1
		<i>Clostridium acetobutylicum</i>	KHD36327.1
		<i>Clostridium acidisoli</i>	WP_084117172.1
		<i>Clostridium algidicarnis</i>	WP_029453564.1
		<i>Clostridium amylolyticum</i>	WP_073011066.1
		<i>Clostridium arbusti</i>	WP_010232832.1
		<i>Clostridium argentinense</i>	WP_039636977.1
		<i>Clostridium aurantibutyricum</i>	WP_077835588.1
		<i>Clostridium baratii</i>	WP_039314979.1
		<i>Clostridium beijerinckii</i>	WP_035149898.1
		<i>Clostridium botulinum</i>	KMJ93218.1
		<i>Clostridium butyricum</i>	MBE6063108.1
		<i>Clostridium carboxidivorans</i>	AKN34150.1
		<i>Clostridium carnis</i>	VDG74730.1
		<i>Clostridium cavendishii</i>	WP_143152500.1
		<i>Clostridium cellulovorans</i>	WP_010076127.1

<i>Clostridium chromiireducens</i>	WP_079441783.1
<i>Clostridium colicanis</i>	WP_061858526.1
<i>Clostridium combesii</i>	WP_003396019.1
<i>Clostridium cuniculi</i>	WP_021429258.1
<i>Clostridium cylindrosporum</i>	WP_048569295.1
<i>Clostridium diolis</i>	WP_012058297.1
<i>Clostridium disporicum</i>	WP_055264612.1
<i>Clostridium fallax</i>	WP_072896881.1
<i>Clostridium felsineum</i>	WP_077835588.1
<i>Clostridium fessum</i>	WP_022360123.1
<i>Clostridium formicaceticum</i>	WP_070967650.1
<i>Clostridium haemolyticum</i>	WP_039218035.1
<i>Clostridium indicum</i>	WP_117419443.1
<i>Clostridium intestinale</i>	WP_021800853.1
<i>Clostridium isatidis</i>	WP_119866588.1
<i>Clostridium jeddahense</i>	WP_009062227.1
<i>Clostridium kluyveri*</i>	BAH05651.1
<i>Clostridium liquoris</i>	WP_106064189.1
<i>Clostridium ljungdahlii*</i>	WP_013239970.1
<i>Clostridium lundense</i>	MBE6066483.1
<i>Clostridium luticellari</i>	WP_106010933.1
<i>Clostridium massiliodiemoense</i>	WP_043989325.1
<i>Clostridium mediterraneense</i>	WP_066874714.1
<i>Clostridium merdae</i>	WP_085833940.1
<i>Clostridium minihomine</i>	WP_101698405.1
<i>Clostridium neonatale</i>	SUQ41384.1
<i>Clostridium nigeriense</i>	WP_066892337.1
<i>Clostridium novyi</i>	WP_039248746.1
<i>Clostridium oryzae</i>	WP_079427436.1
<i>Clostridium pasteurianum</i>	WP_003447692.1
<i>Clostridium peptidivorans</i>	WP_097026699.1
<i>Clostridium perfringens</i>	EGT3616056.1
<i>Clostridium phoceensis</i>	WP_082203602.1
<i>Clostridium polynesiense</i>	WP_040213688.1
<i>Clostridium puniceum</i>	WP_077845794.1
<i>Clostridium putrefaciens</i>	WP_115641522.1
<i>Clostridium roseum</i>	WP_077835588.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015393250.1

		<i>Clostridium sachharobutylicum</i>	WP_077865232.1
		<i>Clostridium sartagoforme</i>	MBE6052625.1
		<i>Clostridium septicum</i>	WP_066678130.1
		<i>Clostridium sordellii</i>	WP_054632017.1
		<i>Clostridium sporogenes</i>	WP_072584711.1
		<i>Clostridium sulfidigenes</i>	WP_035129619.1
		<i>Clostridium taeniosporum</i>	WP_069680533.1
		<i>Clostridium tepidum</i>	WP_078025046.1
		<i>Clostridium tetanomorphum</i>	WP_035149898.1
		<i>Clostridium thermarum</i>	WP_163195485.1
		<i>Clostridium thermopalmarium</i>	WP_061858526.1
		<i>Clostridium thiosulfatireducens</i>	WP_021429258.1
		<i>Clostridium tunisiense</i>	WP_085959911.1
		<i>Clostridium tyrobutyricum</i>	WP_039653563.1
		<i>Clostridium uliginosum</i>	WP_090092484.1
<b>CotJC</b>	<b>9</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003233850.1</b>
		<i>Clostridioides difficile</i>	EQJ49373.1
		<i>Clostridioides mangenotii</i>	WP_027702380.1
		<i>Clostridium aceticum</i>	WP_044823421.1
		<i>Clostridium acetireducens</i>	WP_070110671.1
		<i>Clostridium acetobutylicum</i>	WP_010964647.1
		<i>Clostridium acidisoli</i>	WP_084117174.1
		<i>Clostridium akagii</i>	WP_026881847.1
		<i>Clostridium algidicarnis</i>	WP_104408821.1
		<i>Clostridium amylolyticum</i>	WP_073010834.1
		<i>Clostridium arbusti</i>	WP_010232834.1
		<i>Clostridium argentinense</i>	WP_039636979.1
		<i>Clostridium aurantibutyricum</i>	WP_077835587.1
		<i>Clostridium autoethanogenum</i>	WP_013239971.1
		<i>Clostridium baratii</i>	WP_039314977.1
		<i>Clostridium beijerinckii</i>	WP_077839760.1
		<i>Clostridium bornimense</i>	WP_044039116.1
		<i>Clostridium botulinum</i>	WP_012424008.1
		<i>Clostridium bovisfaecis</i>	QGU96602.1
		<i>Clostridium butyricum</i>	WP_058371840.1
		<i>Clostridium cadaveris</i>	WP_168972143.1
		<i>Clostridium carboxidivorans</i>	WP_007060344.1
		<i>Clostridium carnis</i>	WP_125149017.1



<i>Clostridium cavendishii</i>	WP_072988978.1
<i>Clostridium celatum</i>	WP_005215845.1
<i>Clostridium cellulovorans</i>	WP_010076128.1
<i>Clostridium chromiireducens</i>	WP_079441782.1
<i>Clostridium cochlearium</i>	WP_089863034.1
<i>Clostridium colicanis</i>	WP_061858527.1
<i>Clostridium combesii</i>	WP_012341818.1
<i>Clostridium coskatii</i>	WP_063600075.1
<i>Clostridium cuniculi</i>	WP_195964202.1
<i>Clostridium cylindrosporium</i>	WP_048569296.1
<i>Clostridium diolis</i>	WP_012058296.1
<i>Clostridium disporicum</i>	WP_055264611.1
<i>Clostridium estertheticum</i>	WP_165414511.1
<i>Clostridium fallax</i>	WP_072896884.1
<i>Clostridium felsineum</i>	WP_077835587.1
<i>Clostridium fessum</i>	WP_106999708.1
<i>Clostridium formicaceticum</i>	WP_070967653.1
<i>Clostridium frigidicarnis</i>	WP_090041067.1
<i>Clostridium gasigenes</i>	WP_167867599.1
<i>Clostridium haemolyticum</i>	WP_039218030.1
<i>Clostridium homopropionicum</i>	WP_052222947.1
<i>Clostridium hydrogeniformans</i>	WP_027633044.1
<i>Clostridium indicum</i>	WP_117415273.1
<i>Clostridium intestinale</i>	WP_021800852.1
<i>Clostridium isatidis</i>	WP_119865309.1
<i>Clostridium jeddahense</i>	WP_147584619.1
<i>Clostridium kluveri</i>	WP_011989244.1
<i>Clostridium liquoris</i>	WP_106064190.1
<i>Clostridium ljungdahlii</i>	WP_013239971.1
<i>Clostridium lundense</i>	MBE6066482.1
<i>Clostridium luticellari</i>	WP_106010932.1
<i>Clostridium magnum</i>	WP_066628197.1
<i>Clostridium massiliodiemoense</i>	WP_039280871.1
<i>Clostridium mediterraneense</i>	WP_066874713.1
<i>Clostridium merdae</i>	WP_085833934.1
<i>Clostridium neonatale</i>	WP_058295013.1
<i>Clostridium nigeriense</i>	WP_066892335.1
<i>Clostridium novyi</i>	WP_003379271.1

	<i>Clostridium oryzae</i>	WP_079427438.1
	<i>Clostridium paraputrificum</i>	WP_049177938.1
	<i>Clostridium pasteurianum</i>	WP_003447694.1
	<i>Clostridium peptidivorans</i>	WP_097026698.1
	<i>Clostridium perfringens</i>	WP_003480806.1
	<i>Clostridium polynesiense</i>	WP_040213681.1
	<i>Clostridium puniceum</i>	WP_143329111.1
	<i>Clostridium putrefaciens</i>	WP_115641523.1
	<i>Clostridium ragsdalei</i>	WP_065077810.1
	<i>Clostridium roseum</i>	WP_077835587.1
	<i>Clostridium saccharoperbutylacetonicum</i>	WP_081603988.1
	<i>Clostridium sachharobutylicum</i>	WP_022744929.1
	<i>Clostridium sartagoforme</i>	WP_016208270.1
	<i>Clostridium saudiense</i>	WP_195959353.1
	<i>Clostridium scatologenes</i>	WP_029159603.1
	<i>Clostridium sordellii</i>	WP_055338570.1
	<i>Clostridium sporogenes</i>	WP_058009697.1
	<i>Clostridium sulfidigenes</i>	MBE6060492.1
	<i>Clostridium taeniosporum</i>	WP_069680534.1
	<i>Clostridium tagluense</i>	WP_124999930.1
	<i>Clostridium tepidum</i>	WP_078025045.1
	<i>Clostridium tertium</i>	WP_008677945.1
	<i>Clostridium tetani</i>	WP_129043553.1
	<i>Clostridium tetanomorphum</i>	WP_035149901.1
	<i>Clostridium thermarum</i>	WP_163195484.1
	<i>Clostridium thermopalmarium</i>	WP_061858527.1
	<i>Clostridium thiosulfatireducens</i>	WP_150843740.1
	<i>Clostridium transplantifaecale</i>	WP_125140002.1
	<i>Clostridium tunisiense</i>	WP_017417113.1
	<i>Clostridium tyrobutyricum</i>	WP_039653561.1
	<i>Clostridium uliginosum</i>	WP_090092482.1
	<i>Clostridium ventriculi</i>	WP_195925884.1
	<i>Clostridium vincentii</i>	WP_106058450.1
<b>CotK (SspO)</b>	<b><i>Bacillus subtilis</i></b>	<b>AII35796.1</b>
<b>CotM</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_010886520.1</b>
<b>CotN</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_004398632.1</b>
<b>CotNH/YutH</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003242649.1</b>

<b>CotO/YjbX</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_010886484.1</b>
<b>CotP</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003234154.1</b>
<b>CotQ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_029726373.1</b>
<b>CotR</b>	<b>57</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridioides difficile</i> * <i>Clostridium paraputrificum</i> * <i>Clostridium saccharobutylicum</i> * <i>Clostridium tertium</i> * <i>Clostridium vincentii</i> *	<b>WP_003243674.1</b> WP_074179629.1 WP_195572211.1 WP_139355294.1 WP_008677295.1 WP_106058553.1
<b>CotS</b>	<b>2</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium arbusti</i> <i>Clostridium beijerinckii</i> * <i>Clostridium botulinum</i> * <i>Clostridium butyricum</i> <i>Clostridium carnis</i> * <i>Clostridium cylindrosporum</i> * <i>Clostridium disporicum</i> * <i>Clostridium estertheticum</i> <i>Clostridium felsineum</i> * <i>Clostridium kluyveri</i> <i>Clostridium ljungdahlii</i> * <i>Clostridium nigeriense</i> <i>Clostridium oryzae</i> * <i>Clostridium paraputrificum</i> * <i>Clostridium pasteurianum</i> * <i>Clostridium perfringens</i> * <i>Clostridium putrefaciens</i> * <i>Clostridium roseum</i> * <i>Clostridium saccharobutylicum</i> * <i>Clostridium saccharoperbutylacetonicum</i> <i>Clostridium sporogenes</i> * <i>Clostridium tagluense</i> <i>Clostridium tepidiprofundum</i> * <i>Clostridium tyrobutyricum</i> * <i>Clostridium ventriculi</i> * <i>Clostridium vincentii</i> *	<b>WP_029727105.1</b> WP_010235336.1 WP_011968193.1 WP_003356747.1 WP_002582318.1 WP_125150127.1 KMT22828.1 WP_055267456.1 WP_169829594.1 WP_077834463.1 BAH08345.1 WP_013237485.1 WP_066895874.1 WP_079422578.1 WP_180273121.1 WP_003440649.1 WP_003457404.1 WP_115640682.1 WP_077834463.1 WP_022743790.1 WP_015390672.1 WP_003491826.1 WP_124999921.1 WP_066823767.1 WP_017751740.1 WP_055259591.1 WP_106059221.1
<b>CotSA</b>	<b>47</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003229028.1</b>

		<i>Clostridium acetobutylicum</i>	WP_034584363.1
		<i>Clostridium algidicarnis</i>	WP_029452684.1
		<i>Clostridium aurantibutyricum</i>	WP_077851981.1
		<i>Clostridium baratii</i>	WP_045724769.1
		<i>Clostridium beijerinckii</i>	WP_077856309.1
		<i>Clostridium cadaveris</i>	PWL55889.1
		<i>Clostridium chromiireducens</i>	WP_160359178.1
		<i>Clostridium coskatii*</i>	WP_063600394.1
		<i>Clostridium diolis</i>	WP_011967735.1
		<i>Clostridium estertheticum</i>	WP_164956332.1
		<i>Clostridium liquoris*</i>	WP_170063744.1
		<i>Clostridium magnum</i>	WP_066627754.1
		<i>Clostridium merdae</i>	WP_085833955.1
		<i>Clostridium paraputrificum</i>	SQB95323.1
		<i>Clostridium pasteurianum</i>	WP_015616681.1
		<i>Clostridium perfringens</i>	HAT4171276.1
		<i>Clostridium ragsdalei</i>	WP_065079879.1
		<i>Clostridium roseum*</i>	WP_077835209.1
		<i>Clostridium saccharobutylicum*</i>	WP_077866673.1
		<i>Clostridium saccharoperbutylacetonecium</i>	NRT59139.1
		<i>Clostridium tagluense</i>	WP_124999917.1
		<i>Clostridium tepidiprofundum*</i>	WP_066823314.1
		<i>Clostridium thermobutyricum</i>	WP_080021621.1
<b>CotT</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245601.1</b>
<b>CotU</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_029726907.1</b>
<b>CotV</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_041850969.1</b>
<b>CotW</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245818.1</b>
<b>CotX</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003244668.1</b>
<b>CotY</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003239243.1</b>
<b>CotZ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003244982.1</b>
<b>CoxA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245996.1</b>
<b>CsxA</b>	<b>36</b>	<b><i>Clostridium sporogenes</i></b>	<b>WP_163226358.1</b>
		<i>Clostridium acidisoli</i>	WP_084115156.1
		<i>Clostridium akagii</i>	WP_026884072.1
		<i>Clostridium arbusti</i>	WP_010235718.1
		<i>Clostridium argentinense</i>	WP_039631792.1
		<i>Clostridium autoethanogenum</i>	WP_122057992.1

		<i>Clostridium beijerinckii</i>	WP_077868951.1
		<i>Clostridium botulinum</i>	WP_003483553.1
		<i>Clostridium chromiireducens</i>	WP_119366775.1
		<i>Clostridium cochlearium</i>	WP_111921403.1
		<i>Clostridium combesii</i>	WP_165776184.1
		<i>Clostridium coskatii</i>	WP_013238534.1
		<i>Clostridium diolis</i>	WP_012058811.1
		<i>Clostridium disporicum*</i>	WP_055277766.1
		<i>Clostridium estertheticum</i>	WP_165412813.1
		<i>Clostridium frigidicarnis</i>	WP_090039822.1
		<i>Clostridium hydrogeniformans</i>	WP_027633146.1
		<i>Clostridium ihumii</i>	WP_034439567.1
		<i>Clostridium khuyveri</i>	WP_012103533.1
		<i>Clostridium ljungdahlii</i>	WP_013238534.1
		<i>Clostridium lundense</i>	MBE6078932.1
		<i>Clostridium luticellari</i>	WP_106009231.1
		<i>Clostridium nigeriense</i>	WP_066894478.1
		<i>Clostridium oryzae</i>	WP_079422486.1
		<i>Clostridium pasteurianum</i>	WP_003443628.1
		<i>Clostridium perfringens</i>	WP_008679739.1
		<i>Clostridium puniceum</i>	WP_077845813.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015392056.1
		<i>Clostridium sachharobutylicum</i>	WP_077864205.1
		<i>Clostridium sartagoforme</i>	MBE6053223.1
		<i>Clostridium senegalense</i>	WP_010292045.1
		<i>Clostridium sulfidigenes</i>	MBE6058843.1
		<i>Clostridium tepidum</i>	WP_078024139.1
		<i>Clostridium tertium</i>	WP_008679739.1
		<i>Clostridium thiosulfatireducens</i>	WP_150845159.1
		<i>Clostridium tyrobutyricum</i>	WP_039656318.1
<b>CsxB</b>	<b>44</b>	<b><i>Clostridium sporogenes</i></b>	<b>WP_003486263.1</b>
		<i>Clostridium acidisoli</i>	SMC16986.1
		<i>Clostridium akagii</i>	WP_051624239.1
		<i>Clostridium amazonitimonense</i>	WP_096877955.1
		<i>Clostridium beijerinckii</i>	WP_039770408.1
		<i>Clostridium botulinum</i>	WP_003486263.1
		<i>Clostridium chauvoei</i>	WP_021875407.1
		<i>Clostridium chromiireducens</i>	WP_160358414.1

		<i>Clostridium cochlearium</i>	SDL34270.1
		<i>Clostridium combesii</i>	WP_004451854.1
		<i>Clostridium diolis</i>	WP_039770408.1
		<i>Clostridium estertheticum</i>	WP_171297152.1
		<i>Clostridium homopropionicum</i>	WP_052220407.1
		<i>Clostridium isatidis</i>	WP_119866278.1
		<i>Clostridium liquoris</i>	WP_106064538.1
		<i>Clostridium lundense</i>	MBE6076207.1
		<i>Clostridium pasteurianum</i>	WP_100369918.1
		<i>Clostridium puniceum</i>	WP_077845349.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394837.1
		<i>Clostridium septicum</i>	WP_066675667.1
		<i>Clostridium tagluense</i>	WP_125000579.1
		<i>Clostridium tepidum</i>	WP_078022971.1
		<i>Clostridium tetani</i>	WP_011098835.1
		<i>Clostridium tetanomorphum</i>	WP_035144262.1
<b>CsxC</b>	<b>28</b>	<b><i>Clostridium sporogenes</i></b>	<b>WP_045517358.1</b>
		<i>Clostridium acetobutylicum</i>	WP_013913613.1
		<i>Clostridium algidicarnis</i>	WP_185162103.1
		<i>Clostridium amazonitimonense</i>	WP_051986453.1
		<i>Clostridium amylyticum</i>	WP_073003731.1
		<i>Clostridium arbusti</i>	WP_010236703.1
		<i>Clostridium aurantibutyricum</i>	WP_077835163.1
		<i>Clostridium autoethanogenum</i>	WP_122057993.1
		<i>Clostridium beijerinckii</i>	AWK51783.1
		<i>Clostridium botulinum</i>	WP_003487073.1
		<i>Clostridium bovisfaecis</i>	QGU94921.1
		<i>Clostridium cellulovorans</i>	WP_010077063.1
		<i>Clostridium colicanis</i>	WP_061857134.1
		<i>Clostridium combesii</i>	WP_099837282.1
		<i>Clostridium coskatii</i>	WP_013238535.1
		<i>Clostridium estertheticum</i>	WP_171295336.1
		<i>Clostridium fallax</i>	WP_072892216.1
		<i>Clostridium felsineum</i>	WP_077835163.1
		<i>Clostridium formicaceticum</i>	WP_070973264.1
		<i>Clostridium grantii</i>	WP_073340027.1
		<i>Clostridium haemolyticum</i>	WP_039219214.1
		<i>Clostridium homopropionicum</i>	WP_139205659.1

		<i>Clostridium intestinale</i>	WP_073022546.1
		<i>Clostridium kluyveri</i>	WP_012103530.1
		<i>Clostridium liquoris</i>	WP_106063340.1
		<i>Clostridium ljungdahlii</i>	WP_063555059.1
		<i>Clostridium lundense</i>	MBE6076634.1
		<i>Clostridium luticellari</i>	WP_106010294.1
		<i>Clostridium magnum</i>	SHI32793.1
		<i>Clostridium niameyense</i>	WP_050608482.1
		<i>Clostridium nigeriense</i>	WP_066891509.1
		<i>Clostridium novyi</i>	WP_052113032.1
		<i>Clostridium pasteurianum</i>	WP_003443312.1
		<i>Clostridium peptidivorans</i>	WP_097027055.1
		<i>Clostridium perfringens</i>	WP_008678760.1
		<i>Clostridium polynesiense</i>	WP_052447275.1
		<i>Clostridium puniceum</i>	WP_077847359.1
		<i>Clostridium putrefaciens</i>	WP_115642244.1
		<i>Clostridium roseum</i>	WP_077835163.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015392045.1
		<i>Clostridium sachharobutylicum</i>	WP_077866323.1
		<i>Clostridium sartagoforme</i>	WP_136007235.1
		<i>Clostridium sulfidigenes</i>	WP_051823939.1
		<i>Clostridium tagluense</i>	GCD10759.1
		<i>Clostridium tepidum</i>	WP_078025060.1
		<i>Clostridium tertium</i>	WP_008678760.1
		<i>Clostridium tetanomorphum</i>	WP_051593332.1
		<i>Clostridium thermopalmarium</i>	WP_061857134.1
		<i>Clostridium tunisiense</i>	WP_192812647.1
<b>CwIJ</b>	<b>45</b>	<b><i>Bacillus cereus</i></b>	<b>WP_000538153.1</b>
		<i>Clostridium acetireducens*</i>	WP_070110931.1
		<i>Clostridium autoethanogenum</i>	WP_023162692.1
		<i>Clostridium botulinum*</i>	WP_012047979.1
		<i>Clostridium carboxidivorans</i>	WP_007059161.1
		<i>Clostridium cochlearium*</i>	WP_078024872.1
		<i>Clostridium colicanis*</i>	WP_061858166.1
		<i>Clostridium coskatii</i>	WP_063600350.1
		<i>Clostridium drakei</i>	WP_032075717.1
		<i>Clostridium estertheticum</i>	WP_164957976.1
		<i>Clostridium homopropionicum*</i>	KOA19983.1

		<i>Clostridium liquoris</i> *	WP_106064672.1
		<i>Clostridium ljungdahlii</i>	WP_013237164.1
		<i>Clostridium lundense</i>	WP_027623307.1
		<i>Clostridium luticellari</i>	WP_106008822.1
		<i>Clostridium magnum</i>	KZL90179.1
		<i>Clostridium oryzae</i> *	WP_079424131.1
		<i>Clostridium ragsdalei</i>	WP_065079839.1
		<i>Clostridium scatologenes</i>	WP_029160816.1
		<i>Clostridium sporogenes</i> *	WP_003484012.1
		<i>Clostridium tagluense</i> *	GCD10803.1
		<i>Clostridium tepidiprofundum</i>	WP_066823364.1
		<i>Clostridium thermarum</i>	WP_163192479.1
		<i>Clostridium thermopalmarium</i> *	WP_061858166.1
		<i>Clostridium tyrobutyricum</i>	WP_017752033.1
<b>ExsB</b>	<b>27</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245417.1</b>
		<i>Clostridium aceticum</i>	WP_044824902.1
		<i>Clostridium acetireducens</i>	OFI06010.1
		<i>Clostridium acetobutylicum</i>	WP_034584769.1
		<i>Clostridium acidisoli</i>	SMC26114.1
		<i>Clostridium akagii</i>	WP_026884597.1
		<i>Clostridium arbusti</i>	WP_010241099.1
		<i>Clostridium argentinense</i>	WP_039633722.1
		<i>Clostridium aurantibutyricum</i>	WP_077852900.1
		<i>Clostridium beijerinckii</i>	WP_171780970.1
		<i>Clostridium bornimense</i>	WP_044035865.1
		<i>Clostridium botulinum</i>	WP_075142071.1
		<i>Clostridium butyricum</i>	WP_045144876.1
		<i>Clostridium carboxidivorans</i>	WP_007061434.1
		<i>Clostridium carnis</i>	WP_125149707.1
		<i>Clostridium cellulovorans</i>	WP_010076181.1
		<i>Clostridium chromiireducens</i>	WP_160360532.1
		<i>Clostridium colicanis</i>	WP_061857580.1
		<i>Clostridium combesii</i>	WP_012099661.1
		<i>Clostridium cylindrosporum</i>	WP_048570690.1
		<i>Clostridium diolis</i>	WP_012058752.1
		<i>Clostridium dispersicum</i>	WP_055275877.1
		<i>Clostridium estertheticum</i>	WP_165413924.1
		<i>Clostridium felsineum</i>	WP_077895305.1



		<i>Clostridium formicaceticum</i>	WP_070963229.1
		<i>Clostridium gasigenes</i>	WP_185164839.1
		<i>Clostridium homopropionicum</i>	WP_052222420.1
		<i>Clostridium ihumii</i>	WP_081770894.1
		<i>Clostridium kluyveri</i>	WP_011988993.1
		<i>Clostridium lundense</i>	MBE6076256.1
		<i>Clostridium magnum</i>	WP_066621505.1
		<i>Clostridium neonatale</i>	WP_159116235.1
		<i>Clostridium novyi</i>	WP_039250127.1
		<i>Clostridium pasteurianum</i>	WP_066021339.1
		<i>Clostridium peptidivorans</i>	WP_097027015.1
		<i>Clostridium puniceum</i>	WP_077847427.1
		<i>Clostridium roseum</i>	WP_077834677.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015393380.1
		<i>Clostridium sachharobutylicum</i>	WP_077865222.1
		<i>Clostridium saudiense</i>	WP_195955220.1
		<i>Clostridium sporogenes</i>	WP_014520621.1
		<i>Clostridium taeniosporum</i>	WP_069679846.1
		<i>Clostridium tagluense</i>	WP_125006602.1
		<i>Clostridium tepidiprofundum</i>	WP_066825205.1
		<i>Clostridium tepidum</i>	WP_195923434.1
		<i>Clostridium tetanomorphum</i>	WP_035148073.1
		<i>Clostridium thermobutyricum</i>	WP_195971203.1
		<i>Clostridium thermopalmarium</i>	WP_106024433.1
		<i>Clostridium uliginosum</i>	WP_090087312.1
		<i>Clostridium ventriculi</i>	WP_195925008.1
		<i>Clostridium vincentii</i>	PRR82092.1
<b>ExsD</b>		<b><i>Bacillus cereus</i></b>	<b>WP_098665657.1</b>
<b>ExsE</b>	<b>59</b>	<b><i>Bacillus cereus</i></b>	<b>WP_098536388.1</b>
		<i>Clostridium amylolyticum</i>	WP_073011152.1
		<i>Clostridium cochlearium</i>	WP_089865664.1
		<i>Clostridium polynesiense</i>	WP_040212196.1
		<i>Clostridium tetani</i>	WP_035111065.1
<b>ExsF</b>		<b><i>Bacillus cereus</i></b>	<b>WP_098204691.1</b>
<b>ExsFB</b>		<b><i>Bacillus anthracis</i></b>	<b>QBJ68187.1</b>
<b>ExsG</b>		<b><i>Bacillus cereus</i></b>	<b>WP_000395679.1</b>
<b>ExsH</b>	<b>53</b>	<b><i>Bacillus cereus</i></b>	<b>WP_000183798.1</b>

		<i>Clostridium botulinum</i>	AJD29680.1
		<i>Clostridium sporogenes</i>	WP_082210393.1
<b>ExsJ</b>		<b><i>Bacillus cereus</i></b>	<b>AAN85822.1</b>
<b>ExsK</b>		<b><i>Bacillus cereus</i></b>	<b>WP_000535710.1</b>
<b>ExsM</b>		<b><i>Bacillus cereus</i></b>	<b>WP_074610362.1</b>
<b>ExsY</b>		<b><i>Bacillus cereus</i></b>	<b>WP_001277732.1</b>
<b>FeoA</b>	<b>10</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_003419941.1</b>
		<i>Clostridioides mangenotii</i>	WP_024620153.1
		<i>Clostridium acetireducens</i>	WP_070109722.1
		<i>Clostridium aceticum*</i>	WP_044823468.1
		<i>Clostridium acetobutylicum</i>	WP_010964347.1
		<i>Clostridium acidisoli</i>	WP_084113426.1
		<i>Clostridium akagii</i>	WP_026882812.1
		<i>Clostridium algidicarnis</i>	WP_029452895.1
		<i>Clostridium amazonitimonense</i>	WP_032123427.1
		<i>Clostridium arbusti</i>	WP_010238331.1
		<i>Clostridium argentinense</i>	WP_039630334.1
		<i>Clostridium aurantibutyricum</i>	WP_077835437.1
		<i>Clostridium autoethanogenum</i>	WP_122057912.1
		<i>Clostridium baratii</i>	WP_054200229.1
		<i>Clostridium beijerinckii</i>	WP_012060354.1
		<i>Clostridium bornimense</i>	WP_044035756.1
		<i>Clostridium botulinum</i>	WP_003370000.1
		<i>Clostridium bovisfaecis</i>	QGU95776.1
		<i>Clostridium butyricum</i>	WP_002581702.1
		<i>Clostridium cadaveris</i>	WP_027639378.1
		<i>Clostridium carboxidivorans</i>	WP_007059754.1
		<i>Clostridium carnis</i>	WP_058294236.1
		<i>Clostridium cavendishii</i>	WP_072993693.1
		<i>Clostridium celatum</i>	WP_005211207.1
		<i>Clostridium cellulovorans</i>	WP_010074500.1
		<i>Clostridium chauvoei</i>	WP_021875418.1
		<i>Clostridium chromiireducens</i>	WP_079440165.1
		<i>Clostridium cochlearium</i>	WP_095177647.1
		<i>Clostridium colicanis</i>	WP_061857253.1
		<i>Clostridium collagenovorans</i>	WP_072831864.1
		<i>Clostridium combesii</i>	WP_014520242.1

<i>Clostridium coskatii</i>	WP_063554457.1
<i>Clostridium cuniculi</i>	WP_133014440.1
<i>Clostridium diolis</i>	WP_012060354.1
<i>Clostridium disporicum</i>	WP_042400389.1
<i>Clostridium drakei</i>	WP_029159555.1
<i>Clostridium estertheticum</i>	WP_071611257.1
<i>Clostridium fallax</i>	WP_072892265.1
<i>Clostridium felsineum</i>	WP_077835437.1
<i>Clostridium fessum</i>	WP_022359013.1
<i>Clostridium frigidicarnis</i>	WP_090042023.1
<i>Clostridium gasigenes</i>	WP_185164412.1
<i>Clostridium grantii</i>	WP_073338358.1
<i>Clostridium haemolyticum</i>	WP_003375765.1
<i>Clostridium ihumii</i>	WP_040327316.1
<i>Clostridium indicum</i>	WP_104436552.1
<i>Clostridium intestinale</i>	WP_021803038.1
<i>Clostridium isatidis</i>	WP_119865658.1
<i>Clostridium jeddahense</i>	WP_020074359.1
<i>Clostridium khuyveri</i>	WP_012101997.1
<i>Clostridium liquoris</i>	WP_106062642.1
<i>Clostridium ljungdahlii</i>	WP_063554457.1
<i>Clostridium lundense</i>	WP_027623387.1
<i>Clostridium luticellari</i>	WP_106008613.1
<i>Clostridium magnum</i>	WP_066624629.1
<i>Clostridium massiliodiemoense</i>	WP_003368432.1
<i>Clostridium mediterraneense</i>	WP_066873835.1
<i>Clostridium merdae</i>	WP_085831900.1
<i>Clostridium minihomine</i>	WP_101697371.1
<i>Clostridium neonatale</i>	WP_058294236.1
<i>Clostridium niameyense</i>	WP_050608173.1
<i>Clostridium nigeriense</i>	WP_066890715.1
<i>Clostridium novyi</i>	WP_039249821.1
<i>Clostridium oryzae</i>	WP_079422214.1
<i>Clostridium paraputrificum</i>	WP_099330229.1
<i>Clostridium pasteurianum</i>	WP_004455223.1
<i>Clostridium perfringens</i>	WP_002290585.1
<i>Clostridium puniceum</i>	WP_077846514.1
<i>Clostridium putrefaciens</i>	WP_115640870.1

		<i>Clostridium ragsdalei</i>	WP_065077303.1
		<i>Clostridium roseum</i>	WP_077835437.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_077361658.1
		<i>Clostridium sartagoforme</i>	WP_136003588.1
		<i>Clostridium saudiense</i>	WP_042400389.1
		<i>Clostridium scatologenes</i>	WP_029159555.1
		<i>Clostridium senegalense</i>	WP_010297200.1
		<i>Clostridium septicum</i>	WP_066675647.1
		<i>Clostridium sordellii*</i>	WP_021124557.1
		<i>Clostridium sporogenes</i>	WP_014520242.1
		<i>Clostridium sulfidigenes</i>	WP_035131429.1
		<i>Clostridium taeniosporum</i>	WP_069680529.1
		<i>Clostridium tagluense</i>	WP_124999838.1
		<i>Clostridium tarantellae</i>	WP_152891797.1
		<i>Clostridium tepidiprofundum</i>	WP_066824280.1
		<i>Clostridium tepidum</i>	WP_078024367.1
		<i>Clostridium tertium</i>	WP_008677424.1
		<i>Clostridium tetani</i>	WP_035109940.1
		<i>Clostridium tetanomorphum</i>	WP_035148265.1
		<i>Clostridium thermobutyricum</i>	WP_002597586.1
		<i>Clostridium thermopalmarium</i>	WP_061857253.1
		<i>Clostridium thiosulfatireducens</i>	WP_035131429.1
		<i>Clostridium transplantifaecale</i>	WP_125143027.1
		<i>Clostridium tunisiense</i>	WP_017415963.1
		<i>Clostridium tyrobutyricum</i>	WP_017751545.1
		<i>Clostridium uliginosum</i>	WP_090092494.1
		<i>Clostridium ventriculi</i>	WP_082412284.1
		<i>Clostridium vincentii</i>	WP_106059159.1
<b>FeoB</b>	<b>7</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_077723458.1</b>
		<i>Clostridioides mangenotii</i>	WP_051599159.1
		<i>Clostridium aceticum</i>	AKL93972.1
		<i>Clostridium acetireducens</i>	WP_070110785.1
		<i>Clostridium acetobutylicum</i>	WP_010963770.1
		<i>Clostridium acidisoli</i>	WP_084115581.1
		<i>Clostridium akagii</i>	WP_026883803.1
		<i>Clostridium algidicarnis</i>	WP_185158084.1
		<i>Clostridium amazonitimonense</i>	WP_032121472.1
		<i>Clostridium amylolyticum</i>	WP_073009679.1

<i>Clostridium arbusti</i>	WP_010234708.1
<i>Clostridium argentinense</i>	WP_039630340.1
<i>Clostridium aurantibutyricum</i>	WP_077851009.1
<i>Clostridium autoethanogenum</i>	WP_122058283.1
<i>Clostridium baratii</i>	WP_039314446.1
<i>Clostridium beijerinckii</i>	WP_179440837.1
<i>Clostridium bornimense</i>	WP_044036543.1
<i>Clostridium botulinum</i>	WP_039258268.1
<i>Clostridium bovisfaecis</i>	QGU95777.1
<i>Clostridium butyricum</i>	WP_027636056.1
<i>Clostridium cadaveris</i>	WP_027637906.1
<i>Clostridium carboxidivorans</i>	WP_007062437.1
<i>Clostridium carnis</i>	WP_125149865.1
<i>Clostridium cavendishii</i>	WP_072985688.1
<i>Clostridium celatum</i>	WP_005213812.1
<i>Clostridium cellulovorans</i>	WP_010074501.1
<i>Clostridium chauvoei</i>	WP_079481260.1
<i>Clostridium chromiireducens</i>	WP_160360530.1
<i>Clostridium cochlearium</i>	WP_089862996.1
<i>Clostridium colicanis</i>	WP_061857254.1
<i>Clostridium collagenovorans</i>	WP_072829933.1
<i>Clostridium combesii</i>	WP_061319856.1
<i>Clostridium coskatii</i>	WP_063599854.1
<i>Clostridium cuniculi</i>	WP_195418426.1
<i>Clostridium cylindrosporium</i>	WP_048570752.1
<i>Clostridium diolis</i>	WP_077829793.1
<i>Clostridium disporicum</i>	WP_055277972.1
<i>Clostridium drakei</i>	WP_084572306.1
<i>Clostridium estertheticum</i>	WP_164959614.1
<i>Clostridium fallax</i>	WP_072897913.1
<i>Clostridium felsineum</i>	WP_077893928.1
<i>Clostridium fessum</i>	WP_107000659.1
<i>Clostridium formicaceticum</i>	AOY75825.1
<i>Clostridium frigidicarnis</i>	WP_090041756.1
<i>Clostridium gasigenes</i>	WP_167866307.1
<i>Clostridium grantii</i>	WP_073336116.1
<i>Clostridium haemolyticum</i>	WP_128609621.1
<i>Clostridium homopropionicum</i>	WP_052219706.1

<i>Clostridium hydrogeniformans</i>	WP_027633847.1
<i>Clostridium thumii</i>	WP_034439893.1
<i>Clostridium indicum</i>	WP_117416507.1
<i>Clostridium intestinale</i>	WP_073015632.1
<i>Clostridium isatidis</i>	WP_119865657.1
<i>Clostridium jeddahense</i>	WP_042432997.1
<i>Clostridium khuyveri</i>	WP_012101996.1
<i>Clostridium liquoris</i>	WP_106062643.1
<i>Clostridium ljungdahlii</i>	WP_013238816.1
<i>Clostridium lundense</i>	WP_027623176.1
<i>Clostridium luticellari</i>	WP_106010542.1
<i>Clostridium magnum</i>	WP_066623461.1
<i>Clostridium massiliodiemoense</i>	WP_039281821.1
<i>Clostridium mediterraneense</i>	WP_066875448.1
<i>Clostridium merdae</i>	WP_085831901.1
<i>Clostridium minihomine</i>	WP_101697372.1
<i>Clostridium neonatale</i>	WP_058295611.1
<i>Clostridium niameyense</i>	WP_050607911.1
<i>Clostridium nigeriense</i>	WP_066890718.1
<i>Clostridium novyi</i>	WP_003375461.1
<i>Clostridium oryzae</i>	WP_079422213.1
<i>Clostridium paraputrificum</i>	WP_195542484.1
<i>Clostridium pasteurianum</i>	WP_003446321.1
<i>Clostridium peptidivorans</i>	WP_097027362.1
<i>Clostridium perfringens</i>	WP_142690815.1
<i>Clostridium phoceensis</i>	WP_050623782.1
<i>Clostridium polynesiense</i>	WP_040212099.1
<i>Clostridium puniceum</i>	WP_077847421.1
<i>Clostridium putrefaciens</i>	WP_115640869.1
<i>Clostridium ragsdalei</i>	WP_065079227.1
<i>Clostridium roseum</i>	WP_077836051.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077361660.1
<i>Clostridium sachharobutylicum</i>	WP_077394684.1
<i>Clostridium sartagoforme</i>	WP_016207723.1
<i>Clostridium saudicense</i>	WP_055277972.1
<i>Clostridium scatologenes</i>	WP_029159689.1
<i>Clostridium senegalense</i>	WP_199869852.1
<i>Clostridium septicum</i>	WP_128499587.1

		<i>Clostridium sordellii</i>	WP_055340616.1
		<i>Clostridium sporogenes</i>	WP_163203079.1
		<i>Clostridium sulfidigenes</i>	WP_035133003.1
		<i>Clostridium taeniosporum</i>	WP_069680208.1
		<i>Clostridium tagluense</i>	WP_125006140.1
		<i>Clostridium tarantellae</i>	WP_152889015.1
		<i>Clostridium tepidiprofundum</i>	WP_066822785.1
		<i>Clostridium tepidum</i>	WP_078024841.1
		<i>Clostridium tertium</i>	WP_099345904.1
		<i>Clostridium tetani</i>	WP_130006490.1
		<i>Clostridium tetanomorphum</i>	WP_035144631.1
		<i>Clostridium thermobutyricum</i>	WP_002598203.1
		<i>Clostridium thermopalmarium</i>	WP_106024783.1
		<i>Clostridium thiosulfatireducens</i>	WP_150841559.1
		<i>Clostridium transplantifaecale</i>	WP_125142241.1
		<i>Clostridium tunisiense</i>	WP_017415962.1
		<i>Clostridium tyrobutyricum</i>	WP_017895265.1
		<i>Clostridium uliginosum</i>	WP_090089442.1
		<i>Clostridium ventriculi</i>	WP_055257130.1
		<i>Clostridium vincentii</i>	WP_106060550.1
<b>GerPA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003233088.1</b>
<b>GerPB</b>		<b><i>Bacillus subtilis</i></b>	<b>QFY81408.1</b>
<b>GerPC</b>		<b><i>Bacillus subtilis</i></b>	<b>AFQ56986.1</b>
<b>GerPD</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003233093.1</b>
<b>GerPE</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_010886467.1</b>
<b>GerPF</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003233096.1</b>
<b>GerQ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003227448.1</b>
<b>GerT</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003231207.1</b>
<b>IunA</b>	<b>43</b>	<b><i>Bacillus anthracis</i></b>	<b>QBJ65612.1</b>
		<i>Clostridium carnis</i>	WP_058295669.1
		<i>Clostridium chauvoei</i>	WP_079481425.1
		<i>Clostridium collagenovorans</i>	WP_072831653.1
		<i>Clostridium cuniculi</i>	WP_053831913.1
		<i>Clostridium frigidicarnis</i>	WP_090041348.1
		<i>Clostridium hydrogeniformans</i>	WP_027631342.1
		<i>Clostridium thumii</i>	WP_040327720.1
		<i>Clostridium neonatale</i>	WP_058295669.1

		<i>Clostridium peptidivorans</i>	WP_097026740.1
		<i>Clostridium sartagoforme</i>	WP_136003988.1
		<i>Clostridium senegalense</i>	WP_061995958.1
		<i>Clostridium septicum</i>	WP_066678854.1
		<i>Clostridium sordellii</i>	WP_055333280.1
		<i>Clostridium tetanomorphum</i>	WP_035150577.1
		<i>Clostridium thiosulfatireducens</i>	WP_150843104.1
		<i>Clostridium transplantifaecale</i>	WP_125143474.1
		<i>Clostridium tunisiense</i>	WP_017416873.1
<b>IunH</b>	<b>43</b>	<b><i>Bacillus cereus</i></b>	<b>WP_000029504.1</b>
		<i>Clostridioides difficile*</i>	WP_009889571.1
		<i>Clostridium carboxidivorans</i>	WP_007058917.1
		<i>Clostridium cochlearium</i>	WP_096636103.1
		<i>Clostridium drakei</i>	WP_032077855.1
		<i>Clostridium fessum</i>	WP_107001566.1
		<i>Clostridium hydrogeniformans</i>	WP_027634545.1
		<i>Clostridium neonatale</i>	WP_159136185.1
		<i>Clostridium scatologenes</i>	WP_029160185.1
		<i>Clostridium sordellii*</i>	WP_055342058.1
<b>LipC</b>		<b><i>Bacillus subtilis</i></b>	<b>BAP19127.1</b>
<b>OxdC</b>	<b>62</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243476.1</b>
		<i>Clostridium sporogenes*</i>	WP_033059438.1
<b>OxdD</b>	<b>62</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003231409.1</b>
		<i>Clostridium botulinum*</i>	WP_011948554.1
<b>PrkA</b>	<b>19</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003233433.1</b>
		<i>Clostridioides difficile</i>	CZS10352.1
		<i>Clostridium aceticum</i>	WP_044825289.1
		<i>Clostridium acetobutylicum</i>	WP_034581734.1
		<i>Clostridium acidisoli</i>	WP_084115196.1
		<i>Clostridium akagii</i>	WP_026884100.1
		<i>Clostridium amylolyticum</i>	WP_073008568.1
		<i>Clostridium arbusti</i>	WP_010234130.1
		<i>Clostridium aurantibutyricum</i>	WP_077852390.1
		<i>Clostridium autoethanogenum</i>	WP_029170208.1
		<i>Clostridium baratii</i>	WP_045725840.1
		<i>Clostridium beijerinckii</i>	MBE6087874.1
		<i>Clostridium bornimense</i>	WP_044035790.1



<i>Clostridium botulinum</i>	WP_049178953.1
<i>Clostridium bovisfaecis</i>	QGU94700.1
<i>Clostridium butyricum</i>	ETI89245.1
<i>Clostridium carboxidivorans</i>	WP_007059978.1
<i>Clostridium carnis</i>	WP_125149343.1
<i>Clostridium cavendishii</i>	WP_072988808.1
<i>Clostridium celatum</i>	WP_195244903.1
<i>Clostridium cellulovorans</i>	WP_010076706.1
<i>Clostridium chauvoei</i>	CDG02544.1
<i>Clostridium chromiireducens</i>	OPJ61740.1
<i>Clostridium cochlearium</i>	WP_171303103.1
<i>Clostridium coskatii</i>	WP_013237117.1
<i>Clostridium cuniculi</i>	WP_148321228.1
<i>Clostridium diolis</i>	WP_039770381.1
<i>Clostridium disporicum</i>	WP_055264497.1
<i>Clostridium drakei</i>	WP_032077794.1
<i>Clostridium estertheticum</i>	WP_164956231.1
<i>Clostridium fallax</i>	WP_072892317.1
<i>Clostridium felsineum</i>	WP_077832388.1
<i>Clostridium formicaceticum</i>	WP_070972747.1
<i>Clostridium gasigenes</i>	WP_167866749.1
<i>Clostridium grantii</i>	WP_073340111.1
<i>Clostridium intestinale</i>	WP_073020798.1
<i>Clostridium isatidis</i>	WP_119865557.1
<i>Clostridium khuyveri</i>	WP_011989211.1
<i>Clostridium liquoris</i>	WP_106064685.1
<i>Clostridium ljungdahlii</i>	WP_063555678.1
<i>Clostridium lundense</i>	WP_027623291.1
<i>Clostridium luticellari</i>	WP_106007563.1
<i>Clostridium magnum</i>	WP_066619533.1
<i>Clostridium neonatale</i>	WP_159115695.1
<i>Clostridium nigeriense</i>	WP_066891063.1
<i>Clostridium oryzae</i>	WP_079422573.1
<i>Clostridium paraputrificum</i>	WP_111918348.1
<i>Clostridium pasteurianum</i>	WP_066020669.1
<i>Clostridium peptidivorans</i>	WP_097027097.1
<i>Clostridium perfringens</i>	HAT4364474.1
<i>Clostridium puniceum</i>	WP_077847748.1

		<i>Clostridium ragsdalei</i>	WP_065079790.1
		<i>Clostridium roseum</i>	WP_077832388.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395199.1
		<i>Clostridium sachharobutylicum</i>	WP_077864099.1
		<i>Clostridium sartagoforme</i>	WP_016208762.1
		<i>Clostridium saudicense</i>	WP_042398500.1
		<i>Clostridium scatologenes</i>	WP_029161212.1
		<i>Clostridium septicum</i>	WP_066676879.1
		<i>Clostridium taeniosporum</i>	WP_069680576.1
		<i>Clostridium tarantellae</i>	WP_152888199.1
		<i>Clostridium tertium</i>	WP_008680267.1
		<i>Clostridium tetani</i>	WP_129043641.1
		<i>Clostridium tetanomorphum</i>	WP_035145935.1
		<i>Clostridium thermarum</i>	WP_163192923.1
		<i>Clostridium thermobutyricum</i>	WP_080022377.1
		<i>Clostridium tyrobutyricum</i>	WP_058952933.1
		<i>Clostridium uliginosum</i>	WP_090091518.1
		<i>Clostridium ventriculi</i>	WP_112365077.1
		<i>Clostridium vincentii</i>	WP_106058189.1
<b>SipL</b>	<b>1</b>	<b><i>Clostridioides difficile</i></b>	<b>WP_009898760.1</b>
		<i>Clostridioides mangenotii</i>	WP_027703089.1
		<i>Clostridium aceticum</i>	WP_044825488.1
		<i>Clostridium acetireducens</i>	WP_070110183.1
		<i>Clostridium acetobutylicum</i>	WP_034582537.1
		<i>Clostridium acidisoli</i>	WP_084117741.1
		<i>Clostridium akagii</i>	WP_026882075.1
		<i>Clostridium algidicarnis</i>	WP_104409351.1
		<i>Clostridium amazonitimonense</i>	WP_032121279.1
		<i>Clostridium amylolyticum</i>	WP_073003762.1
		<i>Clostridium arbusti</i>	WP_010235320.1
		<i>Clostridium argentinense</i>	WP_039635129.1
		<i>Clostridium aurantibutyricum</i>	WP_077853474.1
		<i>Clostridium autoethanogenum</i>	AGY76524.1
		<i>Clostridium baratii</i>	WP_039313403.1
		<i>Clostridium beijerinckii</i>	WP_026887497.1
		<i>Clostridium bornimense</i>	WP_044039266.1
		<i>Clostridium botulinum</i>	WP_061319868.1
		<i>Clostridium bovisfaecis</i>	QGU94110.1

<i>Clostridium butyricum</i>	MBE6062270.1
<i>Clostridium cadaveris</i>	WP_035770706.1
<i>Clostridium carboxidivorans</i>	WP_048030413.1
<i>Clostridium carnis</i>	WP_058293668.1
<i>Clostridium cavendishii</i>	WP_072992960.1
<i>Clostridium celatum</i>	WP_005212359.1
<i>Clostridium cellulovorans</i>	WP_010075882.1
<i>Clostridium chauvoei</i>	WP_021876624.1
<i>Clostridium chromiireducens</i>	WP_160358964.1
<i>Clostridium cochlearium</i>	WP_089866132.1
<i>Clostridium colicanis</i>	WP_061858033.1
<i>Clostridium collagenovorans</i>	WP_072831436.1
<i>Clostridium combesii</i>	WP_099839494.1
<i>Clostridium coskatii</i>	OAA91716.1
<i>Clostridium cuniculi</i>	WP_053832375.1
<i>Clostridium cylindrosporium</i>	WP_048569560.1
<i>Clostridium difficile</i>	WP_102815412.1
<i>Clostridium diolis</i>	WP_023974837.1
<i>Clostridium dispericum</i>	WP_042399441.1
<i>Clostridium drakei</i>	WP_032078603.1
<i>Clostridium estertheticum</i>	WP_164956944.1
<i>Clostridium fallax</i>	WP_072895763.1
<i>Clostridium felsineum</i>	WP_077892491.1
<i>Clostridium formicaceticum</i>	WP_070964510.1
<i>Clostridium frigidicarnis</i>	WP_177199411.1
<i>Clostridium gasigenes</i>	WP_089973255.1
<i>Clostridium grantii</i>	WP_073337681.1
<i>Clostridium haemolyticum</i>	WP_039217517.1
<i>Clostridium homopropionicum</i>	WP_052222738.1
<i>Clostridium hydrogeniformans</i>	WP_027632640.1
<i>Clostridium ihumii</i>	WP_034438258.1
<i>Clostridium intestinale</i>	WP_073022529.1
<i>Clostridium isatidis</i>	WP_119866210.1
<i>Clostridium kluyveri</i>	WP_012104046.1
<i>Clostridium liquoris</i>	WP_106062522.1
<i>Clostridium ljungdahlii</i>	WP_063555533.1
<i>Clostridium lundense</i>	MBE6078243.1
<i>Clostridium luticellari</i>	WP_106010074.1

<i>Clostridium magnum</i>	WP_066627367.1
<i>Clostridium massiliodiemoense</i>	WP_003364327.1
<i>Clostridium mediterraneense</i>	WP_066871737.1
<i>Clostridium neonatale</i>	WP_159115535.1
<i>Clostridium niameyense</i>	WP_050608349.1
<i>Clostridium nigeriense</i>	WP_066895865.1
<i>Clostridium novyi</i>	WP_039226996.1
<i>Clostridium oryzae</i>	WP_079422601.1
<i>Clostridium paraputrificum</i>	WP_055184068.1
<i>Clostridium pasteurianum</i>	WP_066021993.1
<i>Clostridium peptidivorans</i>	WP_097026612.1
<i>Clostridium perfringens</i>	WP_142691565.1
<i>Clostridium polynesiense</i>	WP_040210579.1
<i>Clostridium puniceum</i>	WP_077850001.1
<i>Clostridium putrefaciens</i>	WP_115640688.1
<i>Clostridium ragsdalei</i>	WP_065078944.1
<i>Clostridium roseum</i>	WP_077834468.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015390715.1
<i>Clostridium sachharobutylicum</i>	AGX41510.1
<i>Clostridium sartagoforme</i>	MBE6054344.1
<i>Clostridium saudicense</i>	WP_042399441.1
<i>Clostridium scatologenes</i>	WP_029162454.1
<i>Clostridium senegalense</i>	WP_010293837.1
<i>Clostridium septicum</i>	WP_066676569.1
<i>Clostridium sordellii</i>	WP_195346499.1
<i>Clostridium sporogenes</i>	WP_096044955.1
<i>Clostridium sulfidigenes</i>	WP_035134341.1
<i>Clostridium taeniosporum</i>	WP_069678738.1
<i>Clostridium tagluense</i>	WP_124997049.1
<i>Clostridium tarantellae</i>	WP_152888142.1
<i>Clostridium tepidiprofundum</i>	WP_066823750.1
<i>Clostridium tepidum</i>	WP_078023319.1
<i>Clostridium tertium</i>	WP_142691565.1
<i>Clostridium tetani</i>	WP_035110933.1
<i>Clostridium tetanomorphum</i>	WP_173680595.1
<i>Clostridium thermarum</i>	WP_139905714.1
<i>Clostridium thermobutyricum</i>	WP_080022082.1
<i>Clostridium thermopalmarium</i>	MBE6044045.1

		<i>Clostridium thiosulfatireducens</i>	WP_021428051.1
		<i>Clostridium transplantifaecale</i>	WP_125141913.1
		<i>Clostridium tunisiense</i>	WP_017413551.1
		<i>Clostridium tyrobutyricum</i>	WP_017751745.1
		<i>Clostridium uliginosum</i>	WP_090088537.1
		<i>Clostridium ventriculi</i>	WP_055259580.1
		<i>Clostridium vincentii</i>	WP_106059214.1
<b>SleC</b>	<b>20</b>	<b><i>Clostridium perfringens</i></b>	<b>ACO87302.1</b>
		<i>Clostridioides difficile</i>	WP_009888343.1
		<i>Clostridioides mangenotii</i>	WP_024620223.1
		<i>Clostridium acetobutylicum</i>	WP_010966518.1
		<i>Clostridium algidicarnis</i>	WP_029451581.1
		<i>Clostridium amazonitimonense</i>	WP_032123520.1
		<i>Clostridium amylolyticum</i>	WP_073005398.1
		<i>Clostridium argentinense</i>	WP_039634278.1
		<i>Clostridium aurantibutyricum</i>	WP_077834891.1
		<i>Clostridium baratii</i>	WP_045725094.1
		<i>Clostridium beijerinckii</i>	WP_171771876.1
		<i>Clostridium bornimense</i>	WP_084485446.1
		<i>Clostridium botulinum</i>	WP_027098589.1
		<i>Clostridium butyricum</i>	MBE6072289.1
		<i>Clostridium cadaveris</i>	WP_027638442.1
		<i>Clostridium carnis</i>	WP_125147947.1
		<i>Clostridium cavendishii</i>	WP_072989960.1
		<i>Clostridium celatum</i>	WP_005209680.1
		<i>Clostridium cellulovorans</i>	WP_010076863.1
		<i>Clostridium chauvoei</i>	WP_021876701.1
		<i>Clostridium cochlearium</i>	WP_171303433.1
		<i>Clostridium collagenovorans</i>	WP_072832567.1
		<i>Clostridium cuniculi</i>	WP_133016151.1
		<i>Clostridium diolis</i>	WP_174775797.1
		<i>Clostridium disporicum</i>	WP_055275406.1
		<i>Clostridium fallax</i>	WP_072892472.1
		<i>Clostridium felsineum</i>	WP_077893378.1
		<i>Clostridium fessum</i>	WP_181357171.1
		<i>Clostridium frigidicarnis</i>	WP_090041226.1
		<i>Clostridium gasigenes</i>	WP_185164934.1
		<i>Clostridium grantii</i>	WP_073339906.1

		<i>Clostridium hydrogeniformans</i>	WP_027632594.1
		<i>Clostridium thumii</i>	WP_040328193.1
		<i>Clostridium indicum</i>	WP_117416543.1
		<i>Clostridium intestinale</i>	ERK28359.1
		<i>Clostridium isatidis</i>	WP_119864142.1
		<i>Clostridium lundense</i>	WP_027623851.1
		<i>Clostridium mediterraneense</i>	WP_096030729.1
		<i>Clostridium neonatale</i>	WP_058293189.1
		<i>Clostridium nigeriense</i>	WP_066889524.1
		<i>Clostridium paraputrificum</i>	WP_195542433.1
		<i>Clostridium pasteurianum</i>	WP_066021638.1
		<i>Clostridium peptidivorans</i>	WP_097027752.1
		<i>Clostridium phoceensis</i>	WP_050624460.1
		<i>Clostridium polynesiense</i>	WP_082023956.1
		<i>Clostridium puniceum</i>	WP_077848706.1
		<i>Clostridium putrefaciens</i>	WP_115642218.1
		<i>Clostridium roseum</i>	WP_077834891.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_077364454.1
		<i>Clostridium sartagoforme</i>	MBE6053407.1
		<i>Clostridium saudense</i>	WP_055275406.1
		<i>Clostridium senegalense</i>	WP_199870729.1
		<i>Clostridium septicum</i>	WP_066675973.1
		<i>Clostridium sordellii</i>	WP_057547821.1
		<i>Clostridium sulfidigenes</i>	MBE6060131.1
		<i>Clostridium taeniosporum</i>	WP_069678435.1
		<i>Clostridium tarantellae</i>	WP_152888983.1
		<i>Clostridium tepidiprofundum</i>	WP_066826682.1
		<i>Clostridium tertium</i>	WP_097033574.1
		<i>Clostridium tetani</i>	WP_023439333.1
		<i>Clostridium thermobutyricum</i>	WP_080023522.1
		<i>Clostridium thiosulfatireducens</i>	WP_150845443.1
		<i>Clostridium transplantifaecale</i>	WP_125140119.1
		<i>Clostridium tunisiense</i>	WP_017415055.1
		<i>Clostridium uliginosum</i>	WP_090089970.1
		<i>Clostridium ventriculi</i>	WP_055258796.1
		<i>Clostridium vincentii</i>	WP_106059081.1
<b>SleL/YaaH</b>	<b>1</b>	<b><i>Bacillus subtilis</i></b>	<b>AIC96667.1</b>
		<i>Clostridium acetobutylicum</i>	WP_034582259.1

<i>Clostridium acidisoli</i>	WP_084115236.1
<i>Clostridium algidicarnis</i>	WP_185158413.1
<i>Clostridium amazonitimonense</i>	WP_032121012.1
<i>Clostridium argentinense</i>	WP_145953125.1
<i>Clostridium bornimense</i>	WP_044038988.1
<i>Clostridium botulinum</i>	WP_039257163.1
<i>Clostridium bovipaecis</i>	QGU95872.1
<i>Clostridium cadaveris</i>	WP_168972437.1
<i>Clostridium carboxidivorans</i>	WP_007059627.1
<i>Clostridium chauvoei</i>	WP_021876272.1
<i>Clostridium cochlearium</i>	WP_111921177.1
<i>Clostridium colicanis</i>	WP_061859004.1
<i>Clostridium cylindrosporum</i>	WP_048569338.1
<i>Clostridium drakei</i>	WP_032075973.1
<i>Clostridium estertheticum</i>	WP_164960094.1
<i>Clostridium fessum</i>	WP_107001815.1
<i>Clostridium grantii</i>	WP_073338432.1
<i>Clostridium haemolyticum</i>	WP_128609006.1
<i>Clostridium homopropionicum</i>	WP_052220350.1
<i>Clostridium indicum</i>	WP_117415015.1
<i>Clostridium jeddahense</i>	WP_195199766.1
<i>Clostridium kluveri</i>	WP_012101377.1
<i>Clostridium liquoris</i>	WP_106063609.1
<i>Clostridium lundense</i>	MBE6066993.1
<i>Clostridium magnum</i>	WP_066628884.1
<i>Clostridium massiliodiemoense</i>	WP_003363689.1
<i>Clostridium merdae</i>	WP_085833300.1
<i>Clostridium minihomine</i>	WP_101697906.1
<i>Clostridium nigeriense</i>	WP_066894143.1
<i>Clostridium novyi</i>	WP_039253160.1
<i>Clostridium oryzae</i>	WP_079424667.1
<i>Clostridium pasteurianum</i>	WP_015617688.1
<i>Clostridium peptidivorans</i>	WP_097027992.1
<i>Clostridium phoceensis</i>	WP_050624753.1
<i>Clostridium putrefaciens</i>	WP_115640667.1
<i>Clostridium scatologenes</i>	WP_029161929.1
<i>Clostridium septicum</i>	WP_120140904.1
<i>Clostridium tagluense</i>	WP_125005760.1

		<i>Clostridium tepidiprofundum</i>	WP_066821897.1
		<i>Clostridium tetani</i>	WP_023438055.1
		<i>Clostridium thermarum</i>	WP_163191854.1
		<i>Clostridium thermopalmarium</i>	MBE6044328.1
		<i>Clostridium transplantifaecale</i>	WP_125141056.1
<b>SleM</b>	<b>1</b>	<b><i>Clostridium perfringens</i></b>	<b>WP_003450466.1</b>
		<i>Clostridium amylolyticum</i>	WP_073008520.1
		<i>Clostridium argentinense</i>	WP_163247975.1
		<i>Clostridium baratii</i>	WP_055208036.1
		<i>Clostridium beijerinckii</i>	WP_077837098.1
		<i>Clostridium botulinum</i>	NFG61974.1
		<i>Clostridium butyricum</i>	WP_027637130.1
		<i>Clostridium cadaveris</i>	WP_027638461.1
		<i>Clostridium carnis</i>	WP_058294052.1
		<i>Clostridium cavendishii</i>	WP_072988598.1
		<i>Clostridium celatum</i>	WP_195244898.1
		<i>Clostridium cellulovorans</i>	BAV13150.1
		<i>Clostridium chauvoei</i>	WP_021876468.1
		<i>Clostridium chromiireducens</i>	WP_119368101.1
		<i>Clostridium collagenovorans</i>	WP_072829725.1
		<i>Clostridium cuniculi</i>	WP_133013759.1
		<i>Clostridium diolis</i>	WP_011967939.1
		<i>Clostridium disporicum</i>	WP_055264455.1
		<i>Clostridium fallax</i>	WP_072892295.1
		<i>Clostridium frigidicarnis</i>	WP_090041202.1
		<i>Clostridium gasigenes</i>	WP_089971978.1
		<i>Clostridium hydrogeniformans</i>	WP_084315314.1
		<i>Clostridium ihumii</i>	WP_074432674.1
		<i>Clostridium intestinale</i>	WP_181602694.1
		<i>Clostridium isatidis</i>	WP_119865538.1
		<i>Clostridium lundense</i>	MBE6068442.1
		<i>Clostridium mediterraneense</i>	WP_066874588.1
		<i>Clostridium neonatale</i>	WP_058294052.1
		<i>Clostridium nigeriense</i>	WP_066891113.1
		<i>Clostridium paraputrificum</i>	WP_049178922.1
		<i>Clostridium peptidivorans</i>	WP_097028368.1
		<i>Clostridium polynesiense</i>	WP_040210326.1
		<i>Clostridium puniceum</i>	WP_077848932.1



		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395177.1
		<i>Clostridium sachharobutylicum</i>	WP_022749571.1
		<i>Clostridium sartagoforme</i>	WP_016208731.1
		<i>Clostridium saudiense</i>	WP_042398457.1
		<i>Clostridium senegalense</i>	WP_199870746.1
		<i>Clostridium septicum</i>	WP_066676921.1
		<i>Clostridium sulfidigenes</i>	WP_084178182.1
		<i>Clostridium taeniosporum</i>	WP_069680553.1
		<i>Clostridium tarantellae</i>	WP_152888483.1
		<i>Clostridium tertium</i>	WP_097033117.1
		<i>Clostridium thermobutyricum</i>	WP_002598323.1
		<i>Clostridium thiosulfatireducens</i>	WP_150845657.1
		<i>Clostridium tunisiense</i>	WP_017416259.1
		<i>Clostridium uliginosum</i>	WP_090091552.1
		<i>Clostridium ventriculi</i>	WP_055258464.1
		<i>Clostridium vincentii</i>	WP_106058171.1
<b>SodA</b>	<b>21</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_004398583.1</b>
		<i>Clostridioides difficile</i>	EGT2202576.1
		<i>Clostridioides mangenotii</i>	WP_024620089.1
		<i>Clostridium acetireducens*</i>	WP_070109515.1
		<i>Clostridium algidicarnis</i>	WP_029452823.1
		<i>Clostridium amazonitimonense</i>	WP_032121419.1
		<i>Clostridium amylolyticum</i>	WP_073009948.1
		<i>Clostridium baratii</i>	WP_039313207.1
		<i>Clostridium beijerinckii</i>	AWK52303.1
		<i>Clostridium bornimense</i>	WP_044036037.1
		<i>Clostridium botulinum</i>	KEH92783.1
		<i>Clostridium butyricum</i>	WP_043665422.1
		<i>Clostridium cadaveris</i>	WP_074845604.1
		<i>Clostridium carnis</i>	WP_125150069.1
		<i>Clostridium cavendishii</i>	WP_072985498.1
		<i>Clostridium cellulovorans</i>	WP_013291932.1
		<i>Clostridium chauvoei</i>	WP_021875605.1
		<i>Clostridium chromiireducens</i>	OPJ55717.1
		<i>Clostridium colicanis*</i>	WP_165815358.1
		<i>Clostridium collagenovorans</i>	WP_084666078.1
		<i>Clostridium cuniculi</i>	WP_195418701.1
		<i>Clostridium diolis</i>	WP_039772882.1

<i>Clostridium disporicum</i>	WP_084759052.1
<i>Clostridium estertheticum</i>	WP_187356068.1
<i>Clostridium fallax</i>	SHE76048.1
<i>Clostridium frigidicarnis</i>	WP_090042685.1
<i>Clostridium gasigenes</i>	WP_167865478.1
<i>Clostridium homopropionicum*</i>	WP_161803187.1
<i>Clostridium hydrogeniformans</i>	WP_084315515.1
<i>Clostridium ihumii</i>	WP_040327348.1
<i>Clostridium indicum</i>	WP_117417328.1
<i>Clostridium intestinale</i>	WP_175550881.1
<i>Clostridium isatidis</i>	WP_119866247.1
<i>Clostridium jeddahense</i>	WP_042431104.1
<i>Clostridium khuyveri*</i>	WP_012103763.1
<i>Clostridium lundense</i>	WP_027626537.1
<i>Clostridium massiliodiemoense</i>	WP_167370815.1
<i>Clostridium merdae</i>	WP_085832986.1
<i>Clostridium minihomine</i>	WP_101698421.1
<i>Clostridium neonatale</i>	WP_058295198.1
<i>Clostridium niameyense</i>	WP_050607363.1
<i>Clostridium nigeriense</i>	WP_066896048.1
<i>Clostridium novyi</i>	WP_039250504.1
<i>Clostridium paraputrificum</i>	SQB96134.1
<i>Clostridium perfringens</i>	WP_002292861.1
<i>Clostridium polynesiense</i>	WP_040213785.1
<i>Clostridium puniceum</i>	WP_077847924.1
<i>Clostridium putrefaciens</i>	WP_115640813.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394154.1
<i>Clostridium sachharobutylicum</i>	WP_077866198.1
<i>Clostridium sartagoforme</i>	WP_016208066.1
<i>Clostridium saudicense</i>	WP_195953299.1
<i>Clostridium septicum</i>	WP_066676314.1
<i>Clostridium sordellii</i>	WP_021129580.1
<i>Clostridium sulfidigenes</i>	WP_035132638.1
<i>Clostridium taeniosporum</i>	WP_069679732.1
<i>Clostridium tagluense</i>	WP_125002208.1
<i>Clostridium tarantellae</i>	WP_152887509.1
<i>Clostridium tertium</i>	WP_141396877.1
<i>Clostridium thermarum</i>	WP_139904665.1

		<i>Clostridium thermobutyricum</i>	WP_080021580.1
		<i>Clostridium thermopalmarium*</i>	WP_165815358.1
		<i>Clostridium thiosulfatireducens</i>	WP_035132638.1
		<i>Clostridium tunisiense</i>	WP_017413762.1
		<i>Clostridium tyrobutyricum*</i>	WP_017751121.1
		<i>Clostridium uliginosum</i>	WP_090094293.1
		<i>Clostridium vincentii</i>	WP_106058322.1
<b>SodC</b>	<b>33</b>	<b><i>Bacillus cereus</i></b>	<b>WP_095843219.1</b>
		<i>Clostridium aceticum</i>	WP_044825891.1
		<i>Clostridium acetireducens</i>	WP_101495427.1
		<i>Clostridium acetobutylicum</i>	WP_034583496.1
		<i>Clostridium algidicarnis</i>	WP_029452893.1
		<i>Clostridium amazonitimonense</i>	WP_032122755.1
		<i>Clostridium amylolyticum</i>	WP_083599718.1
		<i>Clostridium aurantibutyricum</i>	WP_077852495.1
		<i>Clostridium autoethanogenum</i>	WP_023162038.1
		<i>Clostridium botulinum</i>	WP_106899487.1
		<i>Clostridium bovifaecis</i>	QGU94976.1
		<i>Clostridium cochlearium</i>	WP_096636095.1
		<i>Clostridium colicanis</i>	WP_082787790.1
		<i>Clostridium coskatii</i>	WP_063600715.1
		<i>Clostridium cuniculi</i>	WP_195418375.1
		<i>Clostridium cylindrosporum</i>	WP_048571417.1
		<i>Clostridium estertheticum</i>	WP_164958770.1
		<i>Clostridium felsineum</i>	WP_077894952.1
		<i>Clostridium formicaceticum</i>	WP_070964398.1
		<i>Clostridium haemolyticum</i>	WP_039218674.1
		<i>Clostridium homopropionicum</i>	WP_139205656.1
		<i>Clostridium jeddahense</i>	WP_009065075.1
		<i>Clostridium kluyveri</i>	BAH05416.1
		<i>Clostridium ljungdahlii</i>	WP_013239616.1
		<i>Clostridium lundense</i>	MBE6078484.1
		<i>Clostridium luticellari</i>	WP_106010119.1
		<i>Clostridium massiliodiemoense</i>	WP_167370806.1
		<i>Clostridium merdae</i>	WP_085834076.1
		<i>Clostridium minihomine</i>	WP_101697474.1
		<i>Clostridium niameyense</i>	WP_164995927.1
		<i>Clostridium novyi</i>	AYF55247.1

		<i>Clostridium paraputrificum*</i>	WP_111937338.1
		<i>Clostridium pasteurianum</i>	WP_066019702.1
		<i>Clostridium putrefaciens</i>	WP_115640868.1
		<i>Clostridium ragsdalei</i>	WP_065079630.1
		<i>Clostridium roseum</i>	WP_077835472.1
		<i>Clostridium sordellii</i>	WP_021125648.1
		<i>Clostridium sporogenes</i>	WP_042384112.1
		<i>Clostridium sulfidigenes</i>	WP_035133951.1
		<i>Clostridium tarantellae</i>	WP_152891476.1
		<i>Clostridium tepidum</i>	WP_078024189.1
		<i>Clostridium tetani</i>	WP_011098872.1
		<i>Clostridium thermopalmarium</i>	WP_082787790.1
		<i>Clostridium thiosulfatireducens</i>	WP_150841512.1
<b>SpoIVA</b>	<b>4</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_041053217.1</b>
		<i>Clostridioides difficile</i>	EQJ53821.1
		<i>Clostridioides mangenotii</i>	WP_024621862.1
		<i>Clostridium aceticum</i>	WP_044825087.1
		<i>Clostridium acetireducens</i>	WP_070108994.1
		<i>Clostridium acetobutylicum</i>	WP_034580367.1
		<i>Clostridium acidisoli</i>	WP_084114847.1
		<i>Clostridium akagii</i>	WP_026882353.1
		<i>Clostridium algidicarnis</i>	WP_029453324.1
		<i>Clostridium amazonitimonense</i>	WP_032121816.1
		<i>Clostridium amylolyticum</i>	WP_073004801.1
		<i>Clostridium arbusti</i>	WP_010240946.1
		<i>Clostridium argentinense</i>	WP_039631474.1
		<i>Clostridium aurantibutyricum</i>	WP_077851603.1
		<i>Clostridium autoethanogenum</i>	WP_013237914.1
		<i>Clostridium baratii</i>	WP_055206359.1
		<i>Clostridium beijerinckii</i>	MBE6090049.1
		<i>Clostridium bornimense</i>	WP_044038760.1
		<i>Clostridium botulinum</i>	WP_076175827.1
		<i>Clostridium bovisfaecis</i>	QGU95264.1
		<i>Clostridium butyricum</i>	WP_002579569.1
		<i>Clostridium cadaveris</i>	WP_027638174.1
		<i>Clostridium carboxidivorans</i>	WP_007064508.1
		<i>Clostridium carnis</i>	WP_058295990.1
		<i>Clostridium cavendishii</i>	WP_072987022.1

<i>Clostridium celatum</i>	WP_005213536.1
<i>Clostridium cellulovorans</i>	WP_010077177.1
<i>Clostridium chauvoei</i>	WP_021875505.1
<i>Clostridium chromiireducens</i>	WP_160359444.1
<i>Clostridium cochlearium</i>	WP_089867498.1
<i>Clostridium colicanis</i>	WP_061857513.1
<i>Clostridium collagenovorans</i>	WP_072829306.1
<i>Clostridium combesii</i>	WP_099840042.1
<i>Clostridium coskatii</i>	WP_013237914.1
<i>Clostridium cuniculi</i>	WP_195517313.1
<i>Clostridium cylindrosporum</i>	WP_048570867.1
<i>Clostridium diolis</i>	WP_011968476.1
<i>Clostridium disporicum</i>	WP_055263221.1
<i>Clostridium drakei</i>	WP_032077704.1
<i>Clostridium estertheticum</i>	WP_165413531.1
<i>Clostridium fallax</i>	WP_072896344.1
<i>Clostridium felsineum</i>	WP_077892635.1
<i>Clostridium fessum</i>	WP_106999830.1
<i>Clostridium formicaceticum</i>	WP_070970819.1
<i>Clostridium frigidicarnis</i>	WP_090038462.1
<i>Clostridium gasigenes</i>	WP_185164548.1
<i>Clostridium grantii</i>	WP_073336196.1
<i>Clostridium haemolyticum</i>	WP_003376301.1
<i>Clostridium homopropionicum</i>	WP_052220680.1
<i>Clostridium hydrogeniformans</i>	WP_027634141.1
<i>Clostridium ihumii</i>	WP_040330734.1
<i>Clostridium indicum</i>	WP_117415518.1
<i>Clostridium intestinale</i>	WP_073015872.1
<i>Clostridium isatidis</i>	WP_119865120.1
<i>Clostridium jeddahense</i>	WP_020071751.1
<i>Clostridium khuyveri</i>	WP_073538388.1
<i>Clostridium liquoris</i>	WP_106063589.1
<i>Clostridium ljungdahlii</i>	WP_013237914.1
<i>Clostridium lundense</i>	WP_027626542.1
<i>Clostridium luticellari</i>	WP_106008047.1
<i>Clostridium magnum</i>	WP_066619921.1
<i>Clostridium massiliodiemoense</i>	WP_085829359.1
<i>Clostridium mediterraneense</i>	WP_066873202.1

<i>Clostridium merdae</i>	WP_085833394.1
<i>Clostridium minihomine</i>	WP_101697812.1
<i>Clostridium neonatale</i>	WP_058295990.1
<i>Clostridium niameyense</i>	WP_050607115.1
<i>Clostridium nigeriense</i>	WP_066893917.1
<i>Clostridium novyi</i>	WP_039248956.1
<i>Clostridium oryzae</i>	WP_079426750.1
<i>Clostridium paraputrificum</i>	WP_049176839.1
<i>Clostridium pasteurianum</i>	WP_015615608.1
<i>Clostridium peptidivorans</i>	WP_097025566.1
<i>Clostridium perfringens</i>	WP_008678307.1
<i>Clostridium phoceensis</i>	WP_050624822.1
<i>Clostridium polynesiense</i>	WP_040211622.1
<i>Clostridium puniceum</i>	WP_077849625.1
<i>Clostridium putrefaciens</i>	WP_115641300.1
<i>Clostridium ragsdalei</i>	WP_065077483.1
<i>Clostridium roseum</i>	WP_077833758.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015391371.1
<i>Clostridium sachharobutylicum</i>	WP_077865060.1
<i>Clostridium sartagoforme</i>	WP_016206432.1
<i>Clostridium saudicense</i>	WP_042396977.1
<i>Clostridium scatologenes</i>	WP_029161444.1
<i>Clostridium senegalense</i>	WP_061995489.1
<i>Clostridium septicum</i>	WP_066674505.1
<i>Clostridium sordellii</i>	WP_057545430.1
<i>Clostridium sporogenes</i>	WP_003402547.1
<i>Clostridium sulfidigenes</i>	MBE6060680.1
<i>Clostridium taeniosporum</i>	WP_069679370.1
<i>Clostridium tagluense</i>	WP_125005618.1
<i>Clostridium tarantellae</i>	WP_152887104.1
<i>Clostridium tepidiprofundum</i>	WP_066821508.1
<i>Clostridium tepidum</i>	WP_078022466.1
<i>Clostridium tertium</i>	WP_008678307.1
<i>Clostridium tetani</i>	WP_035141462.1
<i>Clostridium tetanomorphum</i>	WP_035146069.1
<i>Clostridium thermarum</i>	WP_163194062.1
<i>Clostridium thermobutyricum</i>	WP_002597461.1
<i>Clostridium thermopalmarium</i>	WP_061857513.1

		<i>Clostridium thiosulfatireducens</i>	WP_150844786.1
		<i>Clostridium transplantaefaeale</i>	WP_125140406.1
		<i>Clostridium tunisiense</i>	WP_017414565.1
		<i>Clostridium tyrobutyricum</i>	WP_017750676.1
		<i>Clostridium uliginosum</i>	WP_090090178.1
		<i>Clostridium ventriculi</i>	WP_055257215.1
		<i>Clostridium vincentii</i>	WP_106058466.1
<b>SpoVID</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003246083.1</b>
<b>SpoVM</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003221545.1</b>
<b>SpsB</b>	<b>5</b>	<b><i>Bacillus anthracis</i></b>	<b>QBJ66973.1</b>
		<i>Clostridioides difficile</i>	CZR99647.1
		<i>Clostridioides mangenotii</i>	WP_024620221.1
		<i>Clostridium aceticum</i>	WP_044823417.1
		<i>Clostridium acetireducens</i>	WP_070109040.1
		<i>Clostridium acetobutylicum</i>	WP_034581377.1
		<i>Clostridium acidisoli</i>	WP_084117104.1
		<i>Clostridium akagii</i>	WP_026881718.1
		<i>Clostridium algidicarnis</i>	WP_084170522.1
		<i>Clostridium amazonitimonense</i>	WP_032120628.1
		<i>Clostridium amylolyticum</i>	WP_073010907.1
		<i>Clostridium arbusti</i>	WP_010241105.1
		<i>Clostridium argentinense</i>	WP_186269504.1
		<i>Clostridium aurantibutyricum</i>	WP_077833193.1
		<i>Clostridium autoethanogenum</i>	WP_013237280.1
		<i>Clostridium baratii</i>	WP_082201711.1
		<i>Clostridium beijerinckii</i>	WP_173708691.1
		<i>Clostridium bornimense</i>	WP_044040300.1
		<i>Clostridium botulinum</i>	WP_012343673.1
		<i>Clostridium bovisfaecis</i>	QGU96162.1
		<i>Clostridium butyricum</i>	WP_003413763.1
		<i>Clostridium cadaveris</i>	WP_027637360.1
		<i>Clostridium carboxidivorans</i>	WP_007064090.1
		<i>Clostridium carnis</i>	WP_058293165.1
		<i>Clostridium cavendishii</i>	WP_084108920.1
		<i>Clostridium celatum</i>	WP_083875362.1
		<i>Clostridium cellulovorans</i>	WP_010076261.1
		<i>Clostridium chauvoei</i>	WP_021874544.1
		<i>Clostridium chromiireducens</i>	WP_160359595.1

<i>Clostridium cochlearium</i>	WP_095177670.1
<i>Clostridium colicanis</i>	WP_061858165.1
<i>Clostridium collagenovorans</i>	WP_072832143.1
<i>Clostridium combesii</i>	WP_099840133.1
<i>Clostridium coskatii</i>	WP_013237280.1
<i>Clostridium cuniculi</i>	WP_025162738.1
<i>Clostridium cylindrosporum</i>	WP_048570004.1
<i>Clostridium diolis</i>	WP_087702473.1
<i>Clostridium disporicum</i>	WP_055266033.1
<i>Clostridium drakei</i>	WP_032078746.1
<i>Clostridium estertheticum</i>	WP_165414007.1
<i>Clostridium fallax</i>	WP_072895240.1
<i>Clostridium felsineum</i>	WP_077833193.1
<i>Clostridium fessum</i>	WP_107001018.1
<i>Clostridium formicaceticum</i>	WP_070967664.1
<i>Clostridium frigidicarnis</i>	WP_090042345.1
<i>Clostridium gasigenes</i>	WP_185170223.1
<i>Clostridium grantii</i>	WP_073337998.1
<i>Clostridium haemolyticum</i>	WP_039221214.1
<i>Clostridium homopropionicum</i>	WP_052221111.1
<i>Clostridium hydrogeniformans</i>	WP_034849084.1
<i>Clostridium ihumii</i>	WP_034439333.1
<i>Clostridium indicum</i>	WP_117415533.1
<i>Clostridium intestinale</i>	WP_021803181.1
<i>Clostridium isatidis</i>	WP_119866251.1
<i>Clostridium jeddahense</i>	WP_042431033.1
<i>Clostridium kluyveri</i>	WP_198039618.1
<i>Clostridium liquoris</i>	WP_106062816.1
<i>Clostridium ljungdahlii</i>	WP_013237280.1
<i>Clostridium lundense</i>	MBE6077504.1
<i>Clostridium luticellari</i>	WP_106008006.1
<i>Clostridium magnum</i>	WP_066628405.1
<i>Clostridium massiliodiemoense</i>	WP_079997776.1
<i>Clostridium mediterraneense</i>	WP_066875495.1
<i>Clostridium merdae</i>	WP_085833344.1
<i>Clostridium minihomine</i>	WP_101698022.1
<i>Clostridium neonatale</i>	WP_058293165.1
<i>Clostridium niameyense</i>	WP_050607178.1



<i>Clostridium nigeriense</i>	WP_066896786.1
<i>Clostridium novyi</i>	WP_187291592.1
<i>Clostridium oryzae</i>	WP_079423672.1
<i>Clostridium paraputrificum</i>	WP_099330293.1
<i>Clostridium pasteurianum</i>	WP_066022329.1
<i>Clostridium peptidivorans</i>	WP_097025514.1
<i>Clostridium perfringens</i>	WP_002290203.1
<i>Clostridium phoceensis</i>	WP_077138699.1
<i>Clostridium polynesiense</i>	WP_052447254.1
<i>Clostridium puniceum</i>	OOM72339.1
<i>Clostridium putrefaciens</i>	SUY46234.1
<i>Clostridium ragsdalei</i>	WP_065077110.1
<i>Clostridium roseum</i>	WP_077833193.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395515.1
<i>Clostridium sachharobutylicum</i>	WP_022744012.1
<i>Clostridium sartagoforme</i>	WP_016208071.1
<i>Clostridium saudiense</i>	WP_195951271.1
<i>Clostridium scatologenes</i>	WP_026366547.1
<i>Clostridium senegalense</i>	WP_010294451.1
<i>Clostridium septicum</i>	WP_066675105.1
<i>Clostridium sordellii</i>	WP_057561253.1
<i>Clostridium sporogenes</i>	WP_002456288.1
<i>Clostridium sulfidigenes</i>	MBE6060434.1
<i>Clostridium taeniosporum</i>	WP_069681091.1
<i>Clostridium tagluense</i>	WP_125004149.1
<i>Clostridium tarantellae</i>	WP_152887378.1
<i>Clostridium tepidiprofundum</i>	WP_066824846.1
<i>Clostridium tepidum</i>	WP_078023163.1
<i>Clostridium tertium</i>	WP_172617230.1
<i>Clostridium tetani</i>	WP_023438141.1
<i>Clostridium tetanomorphum</i>	KAJ49625.1
<i>Clostridium thermanum</i>	WP_139906487.1
<i>Clostridium thermobutyricum</i>	WP_195972219.1
<i>Clostridium thermopalmarium</i>	WP_061858165.1
<i>Clostridium thiosulfatireducens</i>	WP_025162738.1
<i>Clostridium transplantaefacale</i>	WP_125141773.1
<i>Clostridium tunisiense</i>	WP_017414989.1
<i>Clostridium tyrobutyricum</i>	WP_017752214.1

		<i>Clostridium uliginosum</i>	WP_090092205.1
		<i>Clostridium ventriculi</i>	WP_055256972.1
		<i>Clostridium vincentii</i>	WP_106058359.1
<b>SpsC</b>	<b>16</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243878.1</b>
		<i>Clostridium acetireducens</i>	WP_070110538.1
		<i>Clostridium acetobutylicum</i>	WP_010965558.1
		<i>Clostridium algidicarnis</i>	WP_104410619.1
		<i>Clostridium amazonitimonense</i>	WP_032121985.1
		<i>Clostridium amylolyticum</i>	WP_073006313.1
		<i>Clostridium arbusti</i>	WP_010237138.1
		<i>Clostridium argentinense</i>	WP_039631199.1
		<i>Clostridium aurantibutyricum</i>	WP_077832023.1
		<i>Clostridium autoethanogenum</i>	WP_023162745.1
		<i>Clostridium bornimense</i>	WP_044038216.1
		<i>Clostridium botulinum</i>	WP_030033880.1
		<i>Clostridium bovisfaecis</i>	QGU96005.1
		<i>Clostridium butyricum</i>	WP_070780302.1
		<i>Clostridium cadaveris</i>	WP_074845909.1
		<i>Clostridium carboxidivorans</i>	WP_007060157.1
		<i>Clostridium cavendishii</i>	WP_072990494.1
		<i>Clostridium cellulovorans</i>	WP_010077072.1
		<i>Clostridium cochlearium</i>	WP_096635522.1
		<i>Clostridium colicanis</i>	WP_061858946.1
		<i>Clostridium collagenovorans</i>	WP_072831858.1
		<i>Clostridium combesii</i>	WP_045892960.1
		<i>Clostridium coskatii</i>	WP_013237231.1
		<i>Clostridium cylindrosporum</i>	WP_048569816.1
		<i>Clostridium disporicum</i>	WP_055277222.1
		<i>Clostridium drakei</i>	WP_032078180.1
		<i>Clostridium estertheticum</i>	WP_171298904.1
		<i>Clostridium fallax</i>	WP_111944855.1
		<i>Clostridium felsineum</i>	WP_077892942.1
		<i>Clostridium formicaceticum</i>	WP_070965831.1
		<i>Clostridium grantii</i>	WP_073338963.1
		<i>Clostridium haemolyticum</i>	WP_039228363.1
		<i>Clostridium homopropionicum</i>	WP_052220393.1
		<i>Clostridium ihumii</i>	WP_034440361.1
		<i>Clostridium intestinale</i>	WP_073018639.1

<i>Clostridium isatidis</i>	WP_119866557.1
<i>Clostridium jeddahense</i>	WP_169008984.1
<i>Clostridium kluyveri</i>	WP_012101393.1
<i>Clostridium liquoris</i>	WP_106063442.1
<i>Clostridium ljungdahlii</i>	WP_013237231.1
<i>Clostridium lundense</i>	MBE6068754.1
<i>Clostridium luticellari</i>	WP_106010268.1
<i>Clostridium magnum</i>	WP_066626494.1
<i>Clostridium massiliodielmoense</i>	WP_039281755.1
<i>Clostridium merdae</i>	WP_085834158.1
<i>Clostridium minihomine</i>	WP_101697000.1
<i>Clostridium niameyense</i>	WP_050608487.1
<i>Clostridium novyi</i>	WP_039221783.1
<i>Clostridium oryzae</i>	OPJ65046.1
<i>Clostridium paraputrificum</i>	WP_055184762.1
<i>Clostridium pasteurianum</i>	WP_066022632.1
<i>Clostridium peptidivorans</i>	WP_097025808.1
<i>Clostridium polynesiense</i>	WP_187119255.1
<i>Clostridium putrefaciens</i>	WP_115640274.1
<i>Clostridium ragsdalei</i>	WP_065079900.1
<i>Clostridium roseum</i>	WP_077832023.1
<i>Clostridium saccharobutylicum*</i>	WP_022749254.1
<i>Clostridium saudicense</i>	WP_055277222.1
<i>Clostridium scatologenes</i>	WP_029163419.1
<i>Clostridium senegalense</i>	WP_199870110.1
<i>Clostridium septicum</i>	WP_066677637.1
<i>Clostridium sordellii</i>	WP_057553954.1
<i>Clostridium sporogenes</i>	WP_080544123.1
<i>Clostridium sulfidigenes</i>	WP_035134397.1
<i>Clostridium tagluense</i>	WP_125000965.1
<i>Clostridium tepidiprofundum</i>	WP_066824249.1
<i>Clostridium tepidum</i>	WP_078024287.1
<i>Clostridium tetani</i>	WP_023438558.1
<i>Clostridium tetanomorphum</i>	WP_035144898.1
<i>Clostridium thermarum</i>	WP_139903800.1
<i>Clostridium thermopalmarium</i>	MBE6044265.1
<i>Clostridium thiosulfatireducens</i>	WP_150844481.1
<i>Clostridium transplantaefaecale</i>	WP_125140873.1

		<i>Clostridium tunisiense</i>	WP_017416459.1
		<i>Clostridium tyrobutyricum</i>	WP_017751003.1
		<i>Clostridium vincentii</i>	WP_106058417.1
<b>SpsE</b>	<b>15</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_038429814.1</b>
		<i>Clostridioides difficile</i>	KAA2302075.1
		<i>Clostridium acetobutylicum</i>	WP_010965486.1
		<i>Clostridium acidisoli</i>	WP_084115323.1
		<i>Clostridium akagii</i>	WP_026882559.1
		<i>Clostridium algidicarnis</i>	WP_104410431.1
		<i>Clostridium amazonitimonense</i>	WP_032121982.1
		<i>Clostridium arbusti</i>	WP_010237136.1
		<i>Clostridium argentinense</i>	WP_039632501.1
		<i>Clostridium aurantibutyricum</i>	WP_077835026.1
		<i>Clostridium autoethanogenum</i>	WP_023162747.1
		<i>Clostridium beijerinckii</i>	MBE6087267.1
		<i>Clostridium bornimense</i>	WP_044038220.1
		<i>Clostridium botulinum</i>	EES90882.1
		<i>Clostridium bovisfaecis</i>	QGU94988.1
		<i>Clostridium butyricum</i>	WP_161214326.1
		<i>Clostridium carboxidivorans</i>	WP_007059582.1
		<i>Clostridium carnis</i>	WP_125148960.1
		<i>Clostridium cavendishii</i>	WP_072984369.1
		<i>Clostridium cellulovorans</i>	WP_010074445.1
		<i>Clostridium chauvoei</i>	WP_079481140.1
		<i>Clostridium chromiireducens</i>	WP_160357786.1
		<i>Clostridium cochlearium</i>	WP_095177875.1
		<i>Clostridium colicanis</i>	WP_061857049.1
		<i>Clostridium combesii</i>	WP_099839620.1
		<i>Clostridium coskatii</i>	WP_063601380.1
		<i>Clostridium diolis</i>	WP_087701155.1
		<i>Clostridium drakei</i>	WP_032076676.1
		<i>Clostridium estertheticum</i>	WP_071613063.1
		<i>Clostridium fallax</i>	WP_072893619.1
		<i>Clostridium felsineum</i>	WP_077892711.1
		<i>Clostridium formicaceticum</i>	WP_070965791.1
		<i>Clostridium gasigenes</i>	WP_185164157.1
		<i>Clostridium grantii</i>	WP_073338966.1
		<i>Clostridium haemolyticum</i>	WP_039220294.1

<i>Clostridium homopropionicum</i>	WP_175478649.1
<i>Clostridium hydrogeniformans</i>	WP_027633908.1
<i>Clostridium indicum</i>	WP_117419101.1
<i>Clostridium intestinale</i>	WP_181601753.1
<i>Clostridium kluyveri</i>	WP_012102447.1
<i>Clostridium ljungdahlii</i>	WP_013237233.1
<i>Clostridium lundense</i>	WP_156939888.1
<i>Clostridium magnum</i>	WP_066619059.1
<i>Clostridium massiliodielmoense</i>	WP_039282447.1
<i>Clostridium mediterraneense</i>	WP_066872260.1
<i>Clostridium neonatale</i>	WP_159136449.1
<i>Clostridium niameyense</i>	WP_050606992.1
<i>Clostridium nigeriense</i>	WP_066890582.1
<i>Clostridium novyi</i>	WP_039220294.1
<i>Clostridium oryzae</i>	WP_079425106.1
<i>Clostridium paraputrificum</i>	WP_055254471.1
<i>Clostridium pasteurianum</i>	WP_066022698.1
<i>Clostridium peptidivorans</i>	WP_097025885.1
<i>Clostridium perfringens</i>	WP_099345886.1
<i>Clostridium puniceum</i>	WP_077848476.1
<i>Clostridium putrefaciens</i>	WP_115640238.1
<i>Clostridium ragsdalei</i>	WP_065079902.1
<i>Clostridium roseum</i>	WP_077835026.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394596.1
<i>Clostridium sachharobutylicum</i>	WP_022749224.1
<i>Clostridium sartagoforme</i>	WP_136006795.1
<i>Clostridium scatologenes</i>	WP_029162511.1
<i>Clostridium septicum</i>	WP_066677640.1
<i>Clostridium sordellii</i>	WP_081016377.1
<i>Clostridium sporogenes</i>	WP_003495054.1
<i>Clostridium sulfidigenes</i>	MBE6059800.1
<i>Clostridium taeniosporum</i>	WP_084023836.1
<i>Clostridium tagluense</i>	WP_125003088.1
<i>Clostridium tepidiprofundum</i>	WP_066823328.1
<i>Clostridium tepidum</i>	WP_195923348.1
<i>Clostridium tertium</i>	WP_099345886.1
<i>Clostridium tetani</i>	WP_035140958.1
<i>Clostridium tetanomorphum</i>	WP_173680360.1

		<i>Clostridium thermopalmarium</i>	WP_061857049.1
		<i>Clostridium tyrobutyricum</i>	WP_136710740.1
		<i>Clostridium uliginosum</i>	WP_090089521.1
		<i>Clostridium vincentii</i>	WP_106059476.1
<b>SpsF</b>	<b>29</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243421.1</b>
		<i>Clostridium acetobutylicum</i>	WP_010965489.1
		<i>Clostridium amazonitimonense</i>	WP_032121983.1
		<i>Clostridium arbusti</i>	WP_010237130.1
		<i>Clostridium argentinense</i>	WP_039632496.1
		<i>Clostridium aurantibutyricum</i>	WP_077835013.1
		<i>Clostridium autoethanogenum</i>	WP_023162746.1
		<i>Clostridium beijerinckii</i>	AJH01338.2
		<i>Clostridium bornimense</i>	WP_044038212.1
		<i>Clostridium botulinum</i>	WP_078983253.1
		<i>Clostridium butyricum</i>	WP_163239648.1
		<i>Clostridium carnis</i>	WP_125148961.1
		<i>Clostridium cavendishii</i>	WP_072984370.1
		<i>Clostridium cochlearium</i>	WP_111921736.1
		<i>Clostridium combesii</i>	WP_099839623.1
		<i>Clostridium coskatii</i>	WP_063601379.1
		<i>Clostridium diolis</i>	OVE70738.1
		<i>Clostridium drakei</i>	WP_032076679.1
		<i>Clostridium estertheticum</i>	WP_152752741.1
		<i>Clostridium fallax</i>	SHE57235.1
		<i>Clostridium felsineum</i>	WP_077892713.1
		<i>Clostridium formicaceticum</i>	WP_070973053.1
		<i>Clostridium grantii</i>	WP_073338991.1
		<i>Clostridium intestinale</i>	WP_073020244.1
		<i>Clostridium ljungdahlii</i>	WP_013237232.1
		<i>Clostridium lundense</i>	MBE6077759.1
		<i>Clostridium magnum</i>	WP_066619047.1
		<i>Clostridium massiliodiemoense</i>	WP_039285080.1
		<i>Clostridium neonatale</i>	WP_058296352.1
		<i>Clostridium niameyense</i>	WP_050606991.1
		<i>Clostridium novyi</i>	WP_003375389.1
		<i>Clostridium oryzae</i>	WP_079425104.1
		<i>Clostridium pasteurianum</i>	WP_066023285.1
		<i>Clostridium puniceum</i>	WP_077847256.1

		<i>Clostridium ragsdalei</i>	WP_065079901.1
		<i>Clostridium roseum</i>	WP_077835013.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_077365599.1
		<i>Clostridium sachharobutylicum</i>	WP_022749262.1
		<i>Clostridium scatologenes</i>	WP_029162519.1
		<i>Clostridium septicum</i>	WP_066677644.1
		<i>Clostridium sordellii</i>	WP_057553953.1
		<i>Clostridium sporogenes</i>	WP_163190485.1
		<i>Clostridium taeniosporum</i>	WP_069679071.1
		<i>Clostridium tepidiprofundum</i>	KYH34825.1
		<i>Clostridium tepidum</i>	WP_078022602.1
		<i>Clostridium tetani</i>	WP_011099905.1
		<i>Clostridium thermopalmarium</i>	MBE6044712.1
		<i>Clostridium tyrobutyricum</i>	WP_196008126.1
		<i>Clostridium uliginosum</i>	WP_090094063.1
<b>SpsG</b>	<b>42</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003244190.1</b>
		<i>Clostridium acetobutylicum</i>	WP_034580890.1
		<i>Clostridium algidicarnis</i>	WP_104410432.1
		<i>Clostridium argentinense</i>	WP_039632499.1
		<i>Clostridium aurantibutyricum</i>	WP_077851057.1
		<i>Clostridium beijerinckii</i>	WP_077838756.1
		<i>Clostridium bornimense</i>	WP_051483760.1
		<i>Clostridium botulinum</i>	WP_075141677.1
		<i>Clostridium butyricum</i>	WP_003408935.1
		<i>Clostridium carnis</i>	WP_125148958.1
		<i>Clostridium cavendishii</i>	WP_072984400.1
		<i>Clostridium cochlearium</i>	WP_111921735.1
		<i>Clostridium combesii</i>	WP_099839601.1
		<i>Clostridium fallax</i>	WP_072893629.1
		<i>Clostridium felsineum</i>	WP_077892710.1
		<i>Clostridium intestinale</i>	WP_073020253.1
		<i>Clostridium lundense</i>	MBE6068691.1
		<i>Clostridium neonatale</i>	WP_058296349.1
		<i>Clostridium novyi</i>	WP_052113173.1
		<i>Clostridium oryzae</i>	WP_079422783.1
		<i>Clostridium pasteurianum</i>	WP_066022714.1
		<i>Clostridium roseum</i>	WP_077835015.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394594.1

		<i>Clostridium sordellii</i>	WP_057553956.1
		<i>Clostridium sporogenes</i>	WP_061906427.1
		<i>Clostridium taeniosporum</i>	WP_069679075.1
		<i>Clostridium tarantellae</i>	WP_152888463.1
		<i>Clostridium tepidiprofundum</i>	WP_066824210.1
		<i>Clostridium tetani</i>	WP_035125067.1
<b>SpsI</b>	<b>13</b>	<b><i>Bacillus cereus</i></b>	<b>WP_000676186.1</b>
		<i>Clostridioides difficile</i>	WP_021396406.1
		<i>Clostridium aceticum</i>	WP_044823937.1
		<i>Clostridium acetobutylicum</i>	WP_010965630.1
		<i>Clostridium acidisoli</i>	WP_084114598.1
		<i>Clostridium akagii</i>	WP_026884437.1
		<i>Clostridium algidicarnis</i>	WP_185162640.1
		<i>Clostridium amazonitimonense</i>	WP_032122635.1
		<i>Clostridium amylolyticum</i>	WP_073010748.1
		<i>Clostridium arbusti</i>	WP_010235687.1
		<i>Clostridium aurantibutyricum</i>	WP_077833894.1
		<i>Clostridium autoethanogenum</i>	WP_023162753.1
		<i>Clostridium beijerinckii</i>	WP_038458054.1
		<i>Clostridium bornimense</i>	WP_044039338.1
		<i>Clostridium botulinum</i>	NFO13802.1
		<i>Clostridium butyricum</i>	ETI91849.1
		<i>Clostridium carboxidivorans</i>	WP_007060455.1
		<i>Clostridium carnis</i>	WP_125147746.1
		<i>Clostridium cavendishii</i>	WP_072990519.1
		<i>Clostridium celatum</i>	WP_005209986.1
		<i>Clostridium cellulovorans</i>	WP_010075810.1
		<i>Clostridium chromiireducens</i>	OPJ59543.1
		<i>Clostridium cochlearium</i>	WP_096635455.1
		<i>Clostridium colicanis</i>	WP_061859205.1
		<i>Clostridium collagenovorans</i>	WP_072832615.1
		<i>Clostridium combesii</i>	WP_099837890.1
		<i>Clostridium coskatii</i>	WP_013237238.1
		<i>Clostridium cuniculi</i>	WP_133014394.1
		<i>Clostridium diolis</i>	WP_105411604.1
		<i>Clostridium disporicum</i>	WP_042402754.1
		<i>Clostridium estertheticum</i>	WP_165412482.1
		<i>Clostridium fallax</i>	WP_072892387.1



<i>Clostridium felsineum</i>	WP_077833894.1
<i>Clostridium fessum</i>	WP_107001393.1
<i>Clostridium formicaceticum</i>	WP_070969549.1
<i>Clostridium frigidicarnis</i>	WP_090038613.1
<i>Clostridium gasigenes</i>	WP_185163327.1
<i>Clostridium grantii</i>	WP_073336841.1
<i>Clostridium homopropionicum</i>	WP_052219834.1
<i>Clostridium hydrogeniformans</i>	WP_027631807.1
<i>Clostridium indicum</i>	WP_117417573.1
<i>Clostridium intestinale</i>	WP_181601357.1
<i>Clostridium isatidis</i>	WP_119864584.1
<i>Clostridium jeddahense</i>	WP_169008936.1
<i>Clostridium khuyveri</i>	WP_073539892.1
<i>Clostridium ljungdahlii</i>	WP_013237215.1
<i>Clostridium lundense</i>	WP_027623950.1
<i>Clostridium luticellari</i>	WP_106010678.1
<i>Clostridium magnum</i>	WP_066618011.1
<i>Clostridium mediterraneense</i>	WP_066874758.1
<i>Clostridium neonatale</i>	WP_159136665.1
<i>Clostridium nigeriense</i>	WP_066890536.1
<i>Clostridium oryzae</i>	WP_079421586.1
<i>Clostridium paraputrificum</i>	WP_055184109.1
<i>Clostridium pasteurianum</i>	WP_003443688.1
<i>Clostridium peptidivorans</i>	WP_097027905.1
<i>Clostridium perfringens</i>	WP_002292884.1
<i>Clostridium phoceensis</i>	WP_050623746.1
<i>Clostridium polynesiense</i>	WP_040213531.1
<i>Clostridium puniceum</i>	WP_077847822.1
<i>Clostridium putrefaciens</i>	WP_115640267.1
<i>Clostridium ragsdalei</i>	WP_083985525.1
<i>Clostridium roseum</i>	WP_077833894.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395483.1
<i>Clostridium sachharobutylicum</i>	WP_077866664.1
<i>Clostridium sartagoforme</i>	WP_136006598.1
<i>Clostridium saudicense</i>	WP_042402754.1
<i>Clostridium septicum</i>	WP_066677669.1
<i>Clostridium sordellii</i>	WP_057562202.1
<i>Clostridium sporogenes</i>	SUY61134.1

		<i>Clostridium sulfidigenes</i>	MBE6061649.1
		<i>Clostridium taeniosporum</i>	WP_069680150.1
		<i>Clostridium tagluense</i>	WP_124997431.1
		<i>Clostridium tarantellae</i>	WP_152889136.1
		<i>Clostridium tepidiprofundum</i>	WP_066825121.1
		<i>Clostridium tertium</i>	WP_195624011.1
		<i>Clostridium tetani</i>	WP_035109494.1
		<i>Clostridium tetanomorphum</i>	WP_035148728.1
		<i>Clostridium thermarum</i>	WP_163192835.1
		<i>Clostridium thermobutyricum</i>	WP_080021610.1
		<i>Clostridium thermopalmarium</i>	WP_106024729.1
		<i>Clostridium thiosulfatireducens</i>	WP_150846318.1
		<i>Clostridium transplantifaecale</i>	WP_125143955.1
		<i>Clostridium tunisiense</i>	WP_017413631.1
		<i>Clostridium tyrobutyricum</i>	WP_058953386.1
		<i>Clostridium ventriculi</i>	WP_055258171.1
		<i>Clostridium vincentii</i>	WP_106059295.1
<b>SpsJ</b>	<b>3</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003244201.1</b>
		<i>Clostridioides difficile</i>	WP_070442793.1
		<i>Clostridium aceticum</i>	WP_044823938.1
		<i>Clostridium acetobutylicum</i>	WP_010965629.1
		<i>Clostridium acidisoli</i>	WP_084114599.1
		<i>Clostridium akagii</i>	WP_026884436.1
		<i>Clostridium algidicarnis</i>	WP_185162669.1
		<i>Clostridium amazonitimonense</i>	WP_032122634.1
		<i>Clostridium amylolyticum</i>	WP_073010746.1
		<i>Clostridium arbusti</i>	WP_010235683.1
		<i>Clostridium aurantibutyricum</i>	WP_077833893.1
		<i>Clostridium autoethanogenum</i>	WP_023162735.1
		<i>Clostridium beijerinckii</i>	WP_077829616.1
		<i>Clostridium bornimense</i>	WP_044039337.1
		<i>Clostridium botulinum</i>	NFF80815.1
		<i>Clostridium butyricum</i>	MBE6070344.1
		<i>Clostridium carboxidivorans</i>	EFG87924.1
		<i>Clostridium carnis</i>	WP_125147744.1
		<i>Clostridium cavendishii</i>	WP_072990509.1
		<i>Clostridium celatum</i>	WP_005209978.1
		<i>Clostridium cellulovorans</i>	WP_010075809.1

<i>Clostridium chauvoei</i>	WP_021874807.1
<i>Clostridium chromiireducens</i>	WP_079441012.1
<i>Clostridium cochlearium</i>	WP_096636349.1
<i>Clostridium colicanis</i>	WP_061859191.1
<i>Clostridium collagenovorans</i>	WP_143147733.1
<i>Clostridium combesii</i>	WP_099837887.1
<i>Clostridium coskatii</i>	WP_063601365.1
<i>Clostridium cuniculi</i>	WP_148321358.1
<i>Clostridium diolis</i>	WP_106884497.1
<i>Clostridium disporicum</i>	WP_055265348.1
<i>Clostridium drakei</i>	WP_032076673.1
<i>Clostridium estertheticum</i>	WP_164955554.1
<i>Clostridium fallax</i>	WP_072892385.1
<i>Clostridium felsineum</i>	WP_077833893.1
<i>Clostridium fessum</i>	WP_107001394.1
<i>Clostridium formicaceticum</i>	WP_070965449.1
<i>Clostridium frigidicarnis</i>	WP_090038611.1
<i>Clostridium gasigenes</i>	WP_185163330.1
<i>Clostridium grantii</i>	WP_073336837.1
<i>Clostridium homopropionicum</i>	WP_052219835.1
<i>Clostridium hydrogeniformans</i>	WP_034849317.1
<i>Clostridium indicum</i>	WP_117417572.1
<i>Clostridium intestinale</i>	WP_073022591.1
<i>Clostridium isatidis</i>	WP_119864601.1
<i>Clostridium jeddahense</i>	WP_009062045.1
<i>Clostridium kluyveri</i>	WP_073539891.1
<i>Clostridium ljungdahlii</i>	WP_013237214.1
<i>Clostridium lundense</i>	WP_027623951.1
<i>Clostridium luticellari</i>	WP_106010679.1
<i>Clostridium magnum</i>	WP_066618065.1
<i>Clostridium massiliodielmoense</i>	WP_039285072.1
<i>Clostridium mediterraneense</i>	WP_066874753.1
<i>Clostridium neonatale</i>	WP_058296738.1
<i>Clostridium nigeriense</i>	WP_066890554.1
<i>Clostridium novyi</i>	WP_039256378.1
<i>Clostridium oryzae</i>	WP_079421608.1
<i>Clostridium paraputrificum</i>	WP_055184107.1
<i>Clostridium pasteurianum</i>	WP_015616168.1

		<i>Clostridium peptidivorans</i>	WP_097027904.1
		<i>Clostridium perfringens</i>	WP_003478804.1
		<i>Clostridium polynesiense</i>	WP_040213633.1
		<i>Clostridium puniceum</i>	WP_077848127.1
		<i>Clostridium putrefaciens</i>	WP_115640269.1
		<i>Clostridium ragsdalei</i>	WP_065077066.1
		<i>Clostridium roseum</i>	WP_077833893.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395481.1
		<i>Clostridium sachharobutylicum</i>	AGX43815.1
		<i>Clostridium sartagoforme</i>	WP_136006600.1
		<i>Clostridium saudicense</i>	WP_042402745.1
		<i>Clostridium scatologenes</i>	WP_029162684.1
		<i>Clostridium septicum</i>	WP_066677676.1
		<i>Clostridium sordellii</i>	WP_057562200.1
		<i>Clostridium sporogenes</i>	WP_040108566.1
		<i>Clostridium sulfidigenes</i>	WP_035130907.1
		<i>Clostridium taeniosporum</i>	WP_069680859.1
		<i>Clostridium tagluense</i>	WP_125002392.1
		<i>Clostridium tarantellae</i>	WP_152890019.1
		<i>Clostridium tepidiprofundum</i>	WP_066825126.1
		<i>Clostridium tertium</i>	WP_195624012.1
		<i>Clostridium tetani</i>	WP_129028145.1
		<i>Clostridium tetanomorphum</i>	WP_035147889.1
		<i>Clostridium thermarum</i>	WP_139903819.1
		<i>Clostridium thermobutyricum</i>	WP_080021612.1
		<i>Clostridium thermopalmarium</i>	WP_106024731.1
		<i>Clostridium thiosulfatireducens</i>	WP_150846257.1
		<i>Clostridium transplantifaecale</i>	WP_125140065.1
		<i>Clostridium tunisiense</i>	WP_017413630.1
		<i>Clostridium tyrobutyricum</i>	WP_058953385.1
		<i>Clostridium ventriculi</i>	WP_055258177.1
		<i>Clostridium vincentii</i>	WP_106059303.1
<b>SpsK</b>	<b>3</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003242585.1</b>
		<i>Clostridioides difficile</i>	WP_169467497.1
		<i>Clostridium aceticum</i>	AKL95217.1
		<i>Clostridium acetobutylicum</i>	WP_034581046.1
		<i>Clostridium acidisoli</i>	WP_084114620.1
		<i>Clostridium akagii</i>	WP_026884417.1

<i>Clostridium algidicarnis</i>	WP_104410441.1
<i>Clostridium amazonitimonense</i>	WP_032122628.1
<i>Clostridium amylolyticum</i>	WP_073010727.1
<i>Clostridium arbusti</i>	WP_010239500.1
<i>Clostridium argentinense</i>	KIE48061.1
<i>Clostridium aurantibutyricum</i>	WP_077833876.1
<i>Clostridium autoethanogenum</i>	WP_023162737.1
<i>Clostridium beijerinckii</i>	WP_171780953.1
<i>Clostridium bornimense</i>	WP_044038938.1
<i>Clostridium botulinum</i>	ACA45309.1
<i>Clostridium butyricum</i>	MBE6070341.1
<i>Clostridium carboxidivorans</i>	WP_007060456.1
<i>Clostridium carnis</i>	WP_125147743.1
<i>Clostridium cavendishii</i>	WP_072990513.1
<i>Clostridium celatum</i>	WP_005209980.1
<i>Clostridium cellulovorans</i>	WP_010076923.1
<i>Clostridium chromiireducens</i>	WP_119366195.1
<i>Clostridium cochlearium</i>	WP_168944022.1
<i>Clostridium colicanis</i>	WP_061859204.1
<i>Clostridium collagenovorans</i>	WP_072832614.1
<i>Clostridium coskatii</i>	WP_063601384.1
<i>Clostridium cuniculi</i>	WP_195964633.1
<i>Clostridium cylindrosporium*</i>	WP_048569837.1
<i>Clostridium diolis</i>	WP_103699036.1
<i>Clostridium disporicum</i>	WP_055277990.1
<i>Clostridium estertheticum</i>	WP_171295731.1
<i>Clostridium fallax</i>	WP_072892382.1
<i>Clostridium felsineum</i>	WP_077892901.1
<i>Clostridium fessum</i>	WP_107001395.1
<i>Clostridium formicaceticum</i>	WP_070973018.1
<i>Clostridium frigidicarnis</i>	WP_090038593.1
<i>Clostridium gasigenes</i>	WP_167866646.1
<i>Clostridium grantii</i>	WP_073336839.1
<i>Clostridium hydrogeniformans</i>	WP_027632042.1
<i>Clostridium indicum</i>	WP_117417571.1
<i>Clostridium intestinale</i>	WP_073022597.1
<i>Clostridium isatidis</i>	WP_119864600.1
<i>Clostridium ljungdahlii</i>	WP_013237239.1

<i>Clostridium lundense</i>	WP_027623953.1
<i>Clostridium luticellari</i>	WP_106010677.1
<i>Clostridium magnum</i>	WP_066618076.1
<i>Clostridium mediterraneense</i>	WP_066874755.1
<i>Clostridium neonatale</i>	WP_058296737.1
<i>Clostridium nigeriense</i>	WP_066890551.1
<i>Clostridium oryzae</i>	WP_079421612.1
<i>Clostridium paraputrificum</i>	WP_055184108.1
<i>Clostridium pasteurianum</i>	WP_003443720.1
<i>Clostridium perfringens</i>	EHA0994637.1
<i>Clostridium polynesiense</i>	WP_040213602.1
<i>Clostridium puniceum</i>	WP_077846314.1
<i>Clostridium putrefaciens</i>	WP_115640270.1
<i>Clostridium ragsdalei</i>	WP_065077067.1
<i>Clostridium roseum</i>	WP_077833876.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077361072.1
<i>Clostridium sachharobutylicum</i>	WP_022750216.1
<i>Clostridium sartagoforme</i>	WP_016207772.1
<i>Clostridium saudicense</i>	WP_195951864.1
<i>Clostridium septicum</i>	WP_066677667.1
<i>Clostridium sordellii</i>	WP_057538713.1
<i>Clostridium sporogenes</i>	WP_053818571.1
<i>Clostridium sulfidigenes</i>	WP_035133759.1
<i>Clostridium taenioporum</i>	WP_069680860.1
<i>Clostridium tagluense</i>	WP_125005093.1
<i>Clostridium tarantellae</i>	WP_152890017.1
<i>Clostridium tepidiprofundum</i>	WP_066825122.1
<i>Clostridium tertium</i>	WP_195959434.1
<i>Clostridium tetani</i>	WP_129133209.1
<i>Clostridium tetanomorphum</i>	WP_035148729.1
<i>Clostridium thermarum</i>	WP_163193777.1
<i>Clostridium thermobutyricum</i>	WP_195972825.1
<i>Clostridium thermopalmarium</i>	WP_106024733.1
<i>Clostridium thiosulfatireducens</i>	WP_150843090.1
<i>Clostridium transplantifaecale</i>	WP_125143817.1
<i>Clostridium tyrobutyricum</i>	WP_196007997.1
<i>Clostridium uliginosum</i>	SFC20876.1
<i>Clostridium ventriculi</i>	WP_058992754.1

		<i>Clostridium vincentii</i>	WP_106059294.1
<b>SpsL</b>	<b>24</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003242881.1</b>
		<i>Clostridioides difficile</i>	WP_169467493.1
		<i>Clostridium aceticum</i>	WP_044823939.1
		<i>Clostridium acetobutylicum</i>	WP_010965628.1
		<i>Clostridium acidisoli</i>	WP_084114600.1
		<i>Clostridium akagii</i>	WP_026884435.1
		<i>Clostridium algidicarnis</i>	WP_104410444.1
		<i>Clostridium amazonitimonense</i>	WP_032122633.1
		<i>Clostridium arbusti</i>	WP_010235680.1
		<i>Clostridium aurantibutyricum</i>	WP_077833892.1
		<i>Clostridium autoethanogenum</i>	WP_029170151.1
		<i>Clostridium beijerinckii</i>	WP_041896985.1
		<i>Clostridium bornimense</i>	WP_044039336.1
		<i>Clostridium botulinum</i>	WP_076235372.1
		<i>Clostridium carboxidivorans</i>	WP_007060457.1
		<i>Clostridium cavendishii</i>	WP_072990516.1
		<i>Clostridium celatum</i>	WP_005209982.1
		<i>Clostridium chauvoei</i>	ATD54081.1
		<i>Clostridium chromiireducens</i>	WP_160361786.1
		<i>Clostridium coskatii</i>	WP_063601412.1
		<i>Clostridium cuniculi</i>	WP_195964634.1
		<i>Clostridium diolis</i>	WP_105412071.1
		<i>Clostridium disporicum</i>	WP_042402751.1
		<i>Clostridium estertheticum</i>	WP_152753337.1
		<i>Clostridium fallax</i>	WP_072892386.1
		<i>Clostridium felsineum</i>	WP_077833892.1
		<i>Clostridium fessum</i>	WP_022360048.1
		<i>Clostridium formicaceticum</i>	WP_070969555.1
		<i>Clostridium frigidicarnis</i>	WP_090038599.1
		<i>Clostridium gasigenes</i>	WP_089967360.1
		<i>Clostridium grantii</i>	WP_073336835.1
		<i>Clostridium hydrogeniformans</i>	WP_027632043.1
		<i>Clostridium indicum</i>	WP_117415169.1
		<i>Clostridium isatidis</i>	WP_119864598.1
		<i>Clostridium ljungdahlii</i>	WP_041705604.1
		<i>Clostridium luticellari</i>	WP_106010676.1
		<i>Clostridium oryzae</i>	WP_079421587.1

		<i>Clostridium paraputrificum</i>	WP_055184115.1
		<i>Clostridium pasteurianum</i>	WP_015616167.1
		<i>Clostridium perfringens</i>	WP_008676276.1
		<i>Clostridium puniceum</i>	WP_077848125.1
		<i>Clostridium roseum</i>	WP_077833892.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015391310.1
		<i>Clostridium sachharobutylicum</i>	WP_022750218.1
		<i>Clostridium saudiense</i>	WP_042402751.1
		<i>Clostridium septicum</i>	WP_066677418.1
		<i>Clostridium sporogenes</i>	WP_040108563.1
		<i>Clostridium sulfidigenes</i>	WP_035130905.1
		<i>Clostridium taeniosporum</i>	WP_069680896.1
		<i>Clostridium tagluense</i>	WP_125002390.1
		<i>Clostridium tarantellae</i>	WP_152891568.1
		<i>Clostridium tepidiprofundum</i>	WP_066825124.1
		<i>Clostridium tertium</i>	WP_195959726.1
		<i>Clostridium tetanomorphum</i>	WP_035148730.1
		<i>Clostridium thermanum</i>	WP_139903817.1
		<i>Clostridium transplantaefaecale</i>	WP_125142063.1
		<i>Clostridium tyrobutyricum</i>	WP_039657113.1
		<i>Clostridium ventriculi</i>	WP_055258173.1
		<i>Clostridium vincentii</i>	WP_106059304.1
<b>SscA</b>		<b><i>Bacillus subtilis</i></b>	<b>AEP90096.1</b>
<b>StoA</b>	<b>63</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_077670684.1</b>
		<i>Clostridium carnis*</i>	WP_125148718.1
		<i>Clostridium jeddahense</i>	WP_195199636.1
<b>Tgl</b>	<b>48</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243977.1</b>
		<i>Clostridioides difficile</i>	KAA2301558.1
		<i>Clostridium arbusti</i>	WP_010234689.1
		<i>Clostridium botulinum</i>	NFR57436.1
		<i>Clostridium bovisfaecis</i>	QGU95993.1
		<i>Clostridium carboxidivorans</i>	WP_007063967.1
		<i>Clostridium colicanis</i>	WP_061858954.1
		<i>Clostridium combesii</i>	WP_099839329.1
		<i>Clostridium drakei</i>	WP_032076965.1
		<i>Clostridium estertheticum</i>	WP_165412126.1
		<i>Clostridium homopropionicum</i>	WP_052220390.1
		<i>Clostridium jeddahense</i>	WP_195200996.1



		<i>Clostridium khuyveri</i>	WP_011989107.1
		<i>Clostridium lundense</i>	MBE6068610.1
		<i>Clostridium merdae</i>	WP_085833773.1
		<i>Clostridium minihomine</i>	WP_101696562.1
		<i>Clostridium pasteurianum</i>	WP_015616594.1
		<i>Clostridium peptidivorans</i>	WP_097025950.1
		<i>Clostridium scatologenes</i>	WP_029163769.1
		<i>Clostridium sporogenes</i>	WP_058009102.1
		<i>Clostridium tagluense</i>	WP_125005340.1
		<i>Clostridium thermopalmarium</i>	MBE6044266.1
		<i>Clostridium tyrobutyricum</i>	WP_017751657.1
		<i>Clostridium ventriculi</i>	WP_058992676.1
<b>VT28_33540</b>	<b>2</b>	<b><i>Clostridium sporogenes</i></b>	<b>KRU24872.1</b>
		<i>Clostridium acetireducens</i>	WP_070110171.1
		<i>Clostridium acetobutylicum</i>	WP_010966192.1
		<i>Clostridium acidisoli</i>	WP_084117658.1
		<i>Clostridium akagii</i>	WP_026883315.1
		<i>Clostridium algidicarnis</i>	WP_029452686.1
		<i>Clostridium amazonitimonense</i>	WP_032121272.1
		<i>Clostridium amylolyticum</i>	WP_073003756.1
		<i>Clostridium arbusti</i>	WP_010235332.1
		<i>Clostridium argentinense</i>	WP_039635113.1
		<i>Clostridium aurantibutyricum</i>	WP_077850975.1
		<i>Clostridium autoethanogenum</i>	WP_013236892.1
		<i>Clostridium beijerinckii</i>	AWK53039.1
		<i>Clostridium botulinum</i>	NFH11256.1
		<i>Clostridium butyricum</i>	MBE6062276.1
		<i>Clostridium cadaveris</i>	WP_074845340.1
		<i>Clostridium carboxidivorans</i>	WP_007063781.1
		<i>Clostridium carnis</i>	WP_172437858.1
		<i>Clostridium cavendishii</i>	WP_072992981.1
		<i>Clostridium cellulovorans</i>	WP_010073240.1
		<i>Clostridium chromiireducens</i>	WP_160361624.1
		<i>Clostridium cochlearium</i>	WP_171303690.1
		<i>Clostridium colicanis</i>	WP_061858043.1
		<i>Clostridium collagenovorans</i>	WP_072831442.1
		<i>Clostridium combesii</i>	WP_099839492.1
		<i>Clostridium coskatii</i>	WP_063601726.1

<i>Clostridium diolis</i>	WP_039771785.1
<i>Clostridium disporicum</i>	WP_055265692.1
<i>Clostridium drakei</i>	WP_032078608.1
<i>Clostridium estertheticum</i>	WP_164956949.1
<i>Clostridium felsineum</i>	WP_077892489.1
<i>Clostridium frigidicarnis</i>	WP_090041908.1
<i>Clostridium gasigenes</i>	WP_089973231.1
<i>Clostridium grantii</i>	WP_073340147.1
<i>Clostridium haemolyticum</i>	WP_039217463.1
<i>Clostridium homopropionicum</i>	WP_052222749.1
<i>Clostridium hydrogeniformans</i>	WP_027632650.1
<i>Clostridium ihumii</i>	WP_034438269.1
<i>Clostridium intestinale</i>	WP_073022536.1
<i>Clostridium kluyveri</i>	WP_012104057.1
<i>Clostridium liquoris</i>	WP_146127079.1
<i>Clostridium ljungdahlii</i>	WP_063555528.1
<i>Clostridium lundense</i>	MBE6078249.1
<i>Clostridium luticellari</i>	WP_106010068.1
<i>Clostridium magnum</i>	WP_066627350.1
<i>Clostridium massiliodiemoense</i>	WP_039251706.1
<i>Clostridium neonatale</i>	WP_172437858.1
<i>Clostridium niameyense</i>	WP_129582164.1
<i>Clostridium novyi</i>	WP_142977795.1
<i>Clostridium oryzae</i>	WP_079422579.1
<i>Clostridium paraputrificum</i>	OBY11577.1
<i>Clostridium pasteurianum</i>	WP_003440643.1
<i>Clostridium peptidivorans</i>	WP_097026617.1
<i>Clostridium perfringens</i>	WP_099346101.1
<i>Clostridium polynesiense</i>	WP_040210563.1
<i>Clostridium puniceum</i>	WP_077848382.1
<i>Clostridium putrefaciens</i>	WP_115640683.1
<i>Clostridium ragsdalei</i>	WP_065078939.1
<i>Clostridium roseum</i>	WP_077834462.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015390651.1
<i>Clostridium scatologenes</i>	WP_029162460.1
<i>Clostridium senegalense</i>	WP_061994067.1
<i>Clostridium sporogenes</i>	WP_058007771.1
<i>Clostridium taeniosporum</i>	WP_069678732.1

		<i>Clostridium tagluense</i>	WP_124997037.1
		<i>Clostridium tarantellae</i>	WP_152888130.1
		<i>Clostridium tepidiprofundum</i>	WP_066823770.1
		<i>Clostridium tepidum</i>	WP_078023311.1
		<i>Clostridium tertium</i>	WP_099346101.1
		<i>Clostridium tetani</i>	WP_023437103.1
		<i>Clostridium tetanomorphum</i>	WP_035145134.1
		<i>Clostridium thermarum</i>	WP_163192896.1
		<i>Clostridium thermopalmarium</i>	WP_061858043.1
		<i>Clostridium thiosulfatireducens</i>	WP_150846274.1
		<i>Clostridium tyrobutyricum</i>	WP_017751739.1
		<i>Clostridium uliginosum</i>	WP_090088594.1
		<i>Clostridium ventriculi</i>	WP_146739591.1
		<i>Clostridium vincentii</i>	WP_170065606.1
<b>VT28_37200</b>	<b>34</b>	<b><i>Clostridium saccharoperbutylacetonicum</i></b>	<b>WP_015393251.1</b>
		<i>Clostridium baratii</i>	WP_080753065.1
		<i>Clostridium beijerinckii</i>	AWK53095.1
		<i>Clostridium botulinum</i>	WP_049177935.1
		<i>Clostridium butyricum</i>	MBE6062056.1
		<i>Clostridium carnis</i>	WP_083498770.1
		<i>Clostridium celatum</i>	WP_005215337.1
		<i>Clostridium cellulovorans</i>	WP_010076126.1
		<i>Clostridium combesii</i>	WP_099837273.1
		<i>Clostridium cuniculi</i>	WP_133016665.1
		<i>Clostridium cylindrosporium</i>	WP_082141648.1
		<i>Clostridium disporicum</i>	WP_042395037.1
		<i>Clostridium intestinale</i>	WP_021800854.1
		<i>Clostridium isatidis</i>	WP_119866587.1
		<i>Clostridium lundense</i>	MBE6076616.1
		<i>Clostridium neonatale</i>	WP_083498770.1
		<i>Clostridium nigeriense</i>	WP_066892341.1
		<i>Clostridium paraputrificum</i>	WP_099327815.1
		<i>Clostridium perfringens</i>	WP_008677949.1
		<i>Clostridium puniceum</i>	WP_077845800.1
		<i>Clostridium sartagoforme</i>	WP_136004338.1
		<i>Clostridium saudiense</i>	WP_042395037.1
		<i>Clostridium septicum</i>	WP_083089593.1
		<i>Clostridium sporogenes</i>	WP_058009699.1

		<i>Clostridium taeniosporum</i>	WP_084023888.1
		<i>Clostridium tepidum</i>	WP_078025047.1
		<i>Clostridium tertium</i>	WP_008677949.1
		<i>Clostridium uliginosum</i>	WP_090092488.1
<b>YabG</b>	<b>31</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243478.1</b>
		<i>Clostridioides difficile</i> *	WP_021386497.1
		<i>Clostridium acetireducens</i> *	WP_070110179.1
		<i>Clostridium argentinense</i> *	WP_039635125.1
		<i>Clostridium autoethanogenum</i> *	WP_013236896.1
		<i>Clostridium baratii</i> *	WP_045723889.1
		<i>Clostridium beijerinckii</i> *	WP_168983388.1
		<i>Clostridium botulinum</i> *	NFG62425.1
		<i>Clostridium bovifaecis</i> *	QGU94108.1
		<i>Clostridium butyricum</i> *	WP_156212480.1
		<i>Clostridium chromiireducens</i> *	WP_079438933.1
		<i>Clostridium colicanis</i> *	WP_061858035.1
		<i>Clostridium combesii</i> *	WP_003404983.1
		<i>Clostridium coskatii</i> *	WP_013236896.1
		<i>Clostridium cylindrosporium</i> *	KMT22827.1
		<i>Clostridium diolis</i> *	WP_011967737.1
		<i>Clostridium estertheticum</i> *	MPQ29986.1
		<i>Clostridium felsineum</i> *	WP_077834466.1
		<i>Clostridium homopropionicum</i> *	WP_052222740.1
		<i>Clostridium intestinale</i> *	WP_021800453.1
		<i>Clostridium liquoris</i> *	WP_106062478.1
		<i>Clostridium ljungdahlii</i> *	WP_063555532.1
		<i>Clostridium luticellarii</i> *	WP_106010072.1
		<i>Clostridium magnum</i> *	WP_066627361.1
		<i>Clostridium neonatale</i> *	WP_159115534.1
		<i>Clostridium niameyense</i> *	WP_050608351.1
		<i>Clostridium novyi</i> *	WP_004444340.1
		<i>Clostridium oryzae</i> *	WP_079422599.1
		<i>Clostridium paraputrificum</i> *	WP_027097090.1
		<i>Clostridium perfringens</i> *	WP_151232727.1
		<i>Clostridium puniceum</i> *	WP_077849759.1
		<i>Clostridium ragsdalei</i> *	WP_065078943.1
		<i>Clostridium roseum</i> *	WP_077834466.1
		<i>Clostridium saccharobutylicum</i> *	WP_077865679.1

		<i>Clostridium saccharoperbutylacetonicum*</i>	WP_015390673.1
		<i>Clostridium sartagoforme*</i>	WP_136008005.1
		<i>Clostridium senegalense*</i>	WP_199869293.1
		<i>Clostridium septicum*</i>	WP_066676565.1
		<i>Clostridium sordellii*</i>	WP_021130348.1
		<i>Clostridium sporogenes*</i>	WP_003491828.1
		<i>Clostridium taeniosporum*</i>	WP_069678736.1
		<i>Clostridium tarantellae*</i>	WP_152888138.1
		<i>Clostridium tepidiprofundum*</i>	WP_066823756.1
		<i>Clostridium tertium*</i>	WP_142691566.1
		<i>Clostridium tetani*</i>	WP_035110931.1
		<i>Clostridium thermobutyricum*</i>	WP_002598695.1
		<i>Clostridium thermopalmarium*</i>	WP_061858035.1
		<i>Clostridium tyrobutyricum*</i>	WP_039656699.1
		<i>Clostridium vincentii*</i>	WP_106059218.1
<b>YabP</b>	<b>8</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003226714.1</b>
		<i>Clostridioides difficile*</i>	WP_003421411.1
		<i>Clostridioides manganotii</i>	WP_027700945.1
		<i>Clostridium aceticum</i>	WP_044824670.1
		<i>Clostridium acetireducens</i>	WP_070109856.1
		<i>Clostridium acetobutylicum</i>	WP_010966485.1
		<i>Clostridium akagii</i>	WP_026881755.1
		<i>Clostridium algidicarnis</i>	WP_029451489.1
		<i>Clostridium amazonitimonense</i>	WP_032123598.1
		<i>Clostridium amylolyticum</i>	WP_073010057.1
		<i>Clostridium arbusti</i>	WP_010235217.1
		<i>Clostridium argentinense</i>	WP_039634383.1
		<i>Clostridium aurantibutyricum</i>	WP_077835490.1
		<i>Clostridium autoethanogenum*</i>	WP_013240737.1
		<i>Clostridium baratii*</i>	WP_039312630.1
		<i>Clostridium beijerinckii</i>	WP_026889659.1
		<i>Clostridium bornimense</i>	WP_044039441.1
		<i>Clostridium botulinum</i>	WP_003495814.1
		<i>Clostridium bovisfaecis</i>	QGU96562.1
		<i>Clostridium butyricum</i>	WP_002582983.1
		<i>Clostridium cadaveris</i>	WP_027639679.1
		<i>Clostridium carboxidivorans</i>	WP_007059894.1
		<i>Clostridium carnis</i>	WP_058293122.1

<i>Clostridium cavendishii</i>	WP_072989646.1
<i>Clostridium celatum</i>	WP_005212843.1
<i>Clostridium chauvoei</i>	WP_021876778.1
<i>Clostridium chromiireducens</i>	WP_079438595.1
<i>Clostridium cochlearium</i>	WP_089864386.1
<i>Clostridium colicanis</i>	WP_061858491.1
<i>Clostridium combesii</i>	WP_003359416.1
<i>Clostridium coskatii*</i>	WP_013240737.1
<i>Clostridium cuniculi</i>	WP_148323359.1
<i>Clostridium cylindrosporium*</i>	WP_048570150.1
<i>Clostridium difficile</i>	EQJ52073.1
<i>Clostridium diolis</i>	WP_011967457.1
<i>Clostridium disporicum</i>	WP_042400046.1
<i>Clostridium drakei</i>	WP_029161148.1
<i>Clostridium estertheticum</i>	WP_164957096.1
<i>Clostridium fallax</i>	WP_072892582.1
<i>Clostridium felsineum</i>	WP_077893393.1
<i>Clostridium formicaceticum</i>	WP_070965397.1
<i>Clostridium gasigenes</i>	WP_089970036.1
<i>Clostridium grantii</i>	WP_073340000.1
<i>Clostridium haemolyticum</i>	WP_003374882.1
<i>Clostridium homopropionicum</i>	WP_052222298.1
<i>Clostridium hydrogeniformans</i>	WP_027632566.1
<i>Clostridium ihumii</i>	WP_040330860.1
<i>Clostridium indicum*</i>	WP_117419539.1
<i>Clostridium intestinale</i>	WP_073020443.1
<i>Clostridium isatidis</i>	WP_119864224.1
<i>Clostridium jeddahense</i>	WP_009065926.1
<i>Clostridium liquoris</i>	WP_106064571.1
<i>Clostridium ljungdahlii*</i>	WP_063556999.1
<i>Clostridium lundense</i>	MBE6079142.1
<i>Clostridium luticellari</i>	WP_106008868.1
<i>Clostridium magnum</i>	WP_066616523.1
<i>Clostridium massiliodiemoense</i>	WP_039280923.1
<i>Clostridium mediterraneense</i>	WP_066871028.1
<i>Clostridium merdae</i>	WP_085833035.1
<i>Clostridium minihomine</i>	WP_101696462.1
<i>Clostridium neonatale</i>	WP_058293122.1

<i>Clostridium niameyense</i>	WP_050606231.1
<i>Clostridium nigeriense</i>	WP_066889717.1
<i>Clostridium novyi</i>	WP_011721144.1
<i>Clostridium oryzae</i>	WP_079424858.1
<i>Clostridium paraputrificum</i>	WP_027098504.1
<i>Clostridium pasteurianum</i>	WP_066021673.1
<i>Clostridium peptidivorans</i>	WP_097027779.1
<i>Clostridium perfringens</i>	WP_008681654.1
<i>Clostridium phoceensis</i>	WP_050623617.1
<i>Clostridium polynesiense</i>	WP_040213830.1
<i>Clostridium puniceum</i>	WP_077845832.1
<i>Clostridium putrefaciens</i>	WP_115642154.1
<i>Clostridium ragsdalei*</i>	WP_065076901.1
<i>Clostridium roseum</i>	WP_077835490.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_077359756.1
<i>Clostridium sachharobutylicum</i>	WP_022743492.1
<i>Clostridium sartagoforme</i>	WP_016206849.1
<i>Clostridium saudicense</i>	WP_042400046.1
<i>Clostridium scatologenes</i>	WP_029161148.1
<i>Clostridium senegalense</i>	WP_010297712.1
<i>Clostridium septicum</i>	WP_066674880.1
<i>Clostridium sordellii</i>	WP_021126814.1
<i>Clostridium sporogenes</i>	WP_003495814.1
<i>Clostridium sulfidigenes</i>	WP_035132494.1
<i>Clostridium taeniosporum*</i>	WP_069678509.1
<i>Clostridium tagluense</i>	WP_124998397.1
<i>Clostridium tarantellae</i>	MPQ42166.1
<i>Clostridium tepidiprofundii*</i>	WP_066825383.1
<i>Clostridium tepidum</i>	WP_078024706.1
<i>Clostridium tertium</i>	WP_008681654.1
<i>Clostridium tetani</i>	WP_129030703.1
<i>Clostridium tetanomorphum</i>	WP_035149633.1
<i>Clostridium thermarum</i>	WP_163195362.1
<i>Clostridium thermobutyricum*</i>	WP_002598973.1
<i>Clostridium thermopalmarium</i>	WP_061858491.1
<i>Clostridium thiosulfatireducens</i>	WP_150844629.1
<i>Clostridium transplantifaecale</i>	WP_125141257.1
<i>Clostridium tunisiense</i>	WP_017414763.1

		<i>Clostridium tyrobutyricum</i> *	WP_017753201.1
		<i>Clostridium uliginosum</i>	WP_090089813.1
		<i>Clostridium vincentii</i>	PRR83329.1
<b>YabQ</b>	<b>41</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003243260.1</b>
		<i>Clostridioides difficile</i> *	WP_003425904.1
		<i>Clostridium argentinense</i> *	WP_039634385.1
		<i>Clostridium autoethanogenum</i> *	WP_013240736.1
		<i>Clostridium baratii</i> *	WP_055208332.1
		<i>Clostridium botulinum</i> *	WP_039256832.1
		<i>Clostridium butyricum</i> *	WP_002582982.1
		<i>Clostridium cadaveris</i> *	WP_027639680.1
		<i>Clostridium combesii</i> *	WP_099839805.1
		<i>Clostridium cylindrosporum</i> *	WP_048570149.1
		<i>Clostridium disporicum</i> *	WP_055275357.1
		<i>Clostridium estertheticum</i> *	WP_071614672.1
		<i>Clostridium intestinale</i> *	WP_021804420.1
		<i>Clostridium liquoris</i> *	WP_106064572.1
		<i>Clostridium magnum</i> *	WP_066616525.1
		<i>Clostridium neonatale</i> *	WP_058293121.1
		<i>Clostridium niameyense</i> *	WP_050606230.1
		<i>Clostridium novyi</i> *	WP_039234947.1
		<i>Clostridium oryzae</i> *	OPJ61072.1
		<i>Clostridium pasteurianum</i> *	WP_004455585.1
		<i>Clostridium perfringens</i> *	WP_042258839.1
		<i>Clostridium saccharobutylicum</i> *	WP_022743493.1
		<i>Clostridium saccharoperbutylacetonicum</i> *	WP_015390288.1
		<i>Clostridium sartagoforme</i> *	WP_136008128.1
		<i>Clostridium senegalense</i> *	WP_199870391.1
		<i>Clostridium septicum</i> *	WP_066674883.1
		<i>Clostridium sporogenes</i> *	WP_030032513.1
		<i>Clostridium taenioporum</i> *	WP_069678510.1
		<i>Clostridium tarantellae</i> *	WP_152886581.1
		<i>Clostridium tepidiprofundum</i> *	WP_066825335.1
		<i>Clostridium tetani</i> *	WP_129030702.1
<b>YdgA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003234151.1</b>
<b>YdgB</b>		<b><i>Bacillus subtilis</i></b>	<b>SEN88884.1</b>
<b>YdhD</b>	<b>1</b>	<b><i>Bacillus anthracis</i></b>	<b>QBJ69211.1</b>
		<i>Clostridioides difficile</i>	MBH9787409.1



	<i>Clostridium aceticum</i>	WP_052661205.1
	<i>Clostridium acetireducens</i>	WP_070111088.1
	<i>Clostridium acetobutylicum</i>	WP_010966034.1
	<i>Clostridium akagii</i>	WP_026884142.1
	<i>Clostridium algidicarnis</i>	PPK48893.1
	<i>Clostridium amazonitimonense</i>	WP_032122725.1
	<i>Clostridium arbusti</i>	WP_010233575.1
	<i>Clostridium aurantibutyricum</i>	WP_077835656.1
	<i>Clostridium autoethanogenum</i>	RMD03287.1
	<i>Clostridium beijerinckii</i>	WP_185670363.1
	<i>Clostridium botulinum</i>	WP_003363689.1
	<i>Clostridium butyricum</i> *	WP_156736767.1
	<i>Clostridium cochlearium</i> *	WP_095177623.1
	<i>Clostridium combesii</i>	WP_011948850.1
	<i>Clostridium coskatii</i>	WP_063602347.1
	<i>Clostridium cylindrosporium</i> *	WP_048569126.1
	<i>Clostridium estertheticum</i>	WP_164959513.1
	<i>Clostridium felsineum</i>	WP_077893438.1
	<i>Clostridium formicaceticum</i>	WP_070971851.1
	<i>Clostridium jeddahense</i>	WP_035316927.1
	<i>Clostridium kluyveri</i>	WP_073538058.1
	<i>Clostridium liquoris</i>	WP_106063215.1
	<i>Clostridium ljungdahlii</i>	WP_013239452.1
	<i>Clostridium luticellari</i>	WP_106010718.1
	<i>Clostridium magnum</i> *	WP_066622211.1
	<i>Clostridium niameyense</i>	WP_163249061.1
	<i>Clostridium oryzae</i> *	OPJ64826.1
	<i>Clostridium pasteurianum</i>	WP_003445175.1
	<i>Clostridium putrefaciens</i>	SUY46622.1
	<i>Clostridium ragsdalei</i>	WP_065077271.1
	<i>Clostridium roseum</i>	WP_077835656.1
	<i>Clostridium sporogenes</i>	WP_163257429.1
	<i>Clostridium sulfidigenes</i>	WP_035130718.1
	<i>Clostridium tepidum</i>	WP_078025058.1
	<i>Clostridium tetanomorphum</i>	WP_035145161.1
	<i>Clostridium thiosulfatireducens</i>	WP_150844536.1
	<i>Clostridium tyrobutyricum</i>	WP_017750986.1
<b>YeeK</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003244206.1</b>

<b>YgzC</b>	<b>32</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium homopropionicum</i>	<b>WP_010886449.1</b> WP_052221318.1
<b>YhaX</b>	<b>64</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridioides difficile*</i> <i>Clostridium thermobutyricum*</i>	<b>WP_003233277.1</b> WP_003438534.1 WP_080024261.1
<b>YhbA</b>	<b>60</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium aurantibutyricum</i> <i>Clostridium oryzae</i> <i>Clostridium perfringens</i> <i>Clostridium transplantifaecale</i>	<b>AFQ56810.1</b> WP_077851758.1 WP_079428647.1 WP_002329586.1 WP_125144255.1
<b>YhbB</b>	<b>26</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridioides mangenotii</i> <i>Clostridium aceticum</i> <i>Clostridium acetireducens</i> <i>Clostridium acetobutylicum</i> <i>Clostridium acidisoli</i> <i>Clostridium akagii</i> <i>Clostridium algidicarnis</i> <i>Clostridium amazonitimonense</i> <i>Clostridium amylolyticum</i> <i>Clostridium arbusti</i> <i>Clostridium aurantibutyricum</i> <i>Clostridium autoethanogenum</i> <i>Clostridium beijerinckii</i> <i>Clostridium bornimense</i> <i>Clostridium botulinum</i> <i>Clostridium carboxidivorans</i> <i>Clostridium cavendishii</i> <i>Clostridium combesii</i> <i>Clostridium coskatii</i> <i>Clostridium cuniculi</i> <i>Clostridium diolis</i> <i>Clostridium drakei</i> <i>Clostridium estertheticum</i> <i>Clostridium fallax</i> <i>Clostridium felsineum</i> <i>Clostridium ihumii</i> <i>Clostridium isatidis</i>	<b>WP_010886452.1</b> WP_027702753.1 WP_044825766.1 WP_070111269.1 WP_034582156.1 WP_084114951.1 WP_026882256.1 WP_185162446.1 WP_187117408.1 WP_073003712.1 WP_010239245.1 WP_077852248.1 WP_122059740.1 WP_026889242.1 CDM67615.1 WP_061327688.1 WP_007062287.1 WP_072985081.1 WP_099838253.1 WP_063600127.1 WP_195418319.1 WP_087701569.1 WP_032078769.1 WP_164955479.1 WP_072892254.1 WP_077895479.1 WP_040329106.1 WP_119864366.1

		<i>Clostridium jeddahense</i>	WP_009063413.1
		<i>Clostridium kluyveri</i>	WP_012102777.1
		<i>Clostridium liquoris</i>	WP_106063392.1
		<i>Clostridium ljungdahlii</i>	WP_013239725.1
		<i>Clostridium lundense</i>	MBE6076125.1
		<i>Clostridium luticellari</i>	WP_106010693.1
		<i>Clostridium magnum</i>	WP_066620124.1
		<i>Clostridium merdae</i>	WP_085833442.1
		<i>Clostridium minihomine</i>	WP_101697764.1
		<i>Clostridium niameyense</i>	WP_163249123.1
		<i>Clostridium pasteurianum</i>	WP_015616373.1
		<i>Clostridium peptidivorans</i>	WP_097027191.1
		<i>Clostridium phoceensis</i>	WP_050624816.1
		<i>Clostridium polynesiense</i>	WP_040210502.1
		<i>Clostridium putrefaciens</i>	WP_115640827.1
		<i>Clostridium ragsdalei</i>	WP_065077942.1
		<i>Clostridium roseum</i>	WP_077834144.1
		<i>Clostridium scatologenes</i>	WP_026366470.1
		<i>Clostridium sordellii</i>	WP_057543890.1
		<i>Clostridium sporogenes</i>	WP_061327688.1
		<i>Clostridium tagluense</i>	WP_125000830.1
		<i>Clostridium tarantellae</i>	WP_152892168.1
		<i>Clostridium tepidum</i>	WP_078023829.1
		<i>Clostridium tetanomorphum</i>	WP_035148007.1
		<i>Clostridium thiosulfatireducens</i>	WP_148549711.1
		<i>Clostridium transplantaefacale</i>	WP_125142391.1
		<i>Clostridium tyrobutyricum</i>	WP_017751198.1
<b>YhcN</b>	<b>52</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245125.1</b>
		<i>Clostridium acetireducens</i> *	OFI05056.1
		<i>Clostridium botulinum</i> *	WP_011948161.1
		<i>Clostridium cochlearium</i> *	WP_096635573.1
		<i>Clostridium colicanis</i> *	WP_061857822.1
		<i>Clostridium homopropionicum</i>	WP_052221978.1
		<i>Clostridium liquoris</i> *	WP_106063508.1
		<i>Clostridium lundense</i>	MBE6068697.1
		<i>Clostridium niameyense</i>	WP_050608128.1
		<i>Clostridium sporogenes</i> *	WP_004461550.1
		<i>Clostridium thermopalmarium</i> *	WP_061857822.1

<b>YhcQ</b>	<b>32</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium aurantibutyricum</i> <i>Clostridium autoethanogenum</i> <i>Clostridium bovisfaecis</i> <i>Clostridium felsineum</i> <i>Clostridium ljungdahlii</i> <i>Clostridium pasteurianum</i> <i>Clostridium roseum</i>	<b>WP_009966881.1</b> WP_077853519.1 WP_013239617.1 QGU94448.1 WP_077895299.1 WP_013239617.1 WP_004455203.1 WP_077835590.1
<b>YhcC</b>	<b>54</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium thermarum</i>	<b>WP_003245845.1</b> WP_139904920.1
<b>YheD</b>	<b>54</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridium aceticum</i> <i>Clostridium bovisfaecis</i> <i>Clostridium cellulovorans</i> <i>Clostridium formicaceticum</i> <i>Clostridium pasteurianum</i> <i>Clostridium thermarum</i>	<b>WP_003245015.1</b> WP_052661187.1 QGU95875.1 WP_010074497.1 WP_070971089.1 WP_015615801.1 WP_163192450.1
<b>YhjQ</b>	<b>35</b>	<b><i>Bacillus subtilis</i></b> <i>Clostridioides difficile</i> <i>Clostridium acetobutylicum</i> <i>Clostridium acidisoli</i> <i>Clostridium amazonitimonense</i> <i>Clostridium amylolyticum</i> <i>Clostridium aurantibutyricum</i> <i>Clostridium autoethanogenum</i> <i>Clostridium beijerinckii</i> <i>Clostridium botulinum</i> <i>Clostridium bovisfaecis</i> <i>Clostridium butyricum</i> <i>Clostridium carboxidivorans</i> <i>Clostridium cavendishii</i> <i>Clostridium cellulovorans</i> <i>Clostridium chromiireducens</i> <i>Clostridium coskatii</i> <i>Clostridium cylindrosporium</i> <i>Clostridium diolis</i> <i>Clostridium felsineum</i> <i>Clostridium gasigenes</i>	<b>WP_009966950.1</b> KAA2301226.1 WP_034585484.1 WP_084114545.1 WP_032121163.1 WP_073005050.1 WP_077851272.1 WP_122059878.1 WP_077844236.1 WP_019278446.1 QGU96811.1 ETI91231.1 WP_007062421.1 WP_072988988.1 WP_010077522.1 WP_119368066.1 WP_013238935.1 WP_048569945.1 WP_077868678.1 WP_077893071.1 WP_185163271.1

		<i>Clostridium haemolyticum</i>	WP_039222089.1
		<i>Clostridium homopropionicum</i>	WP_052219947.1
		<i>Clostridium jeddahense</i>	WP_009066149.1
		<i>Clostridium kluyveri</i>	WP_073539787.1
		<i>Clostridium ljungdahlii</i>	WP_013238935.1
		<i>Clostridium lundense</i>	MBE6076301.1
		<i>Clostridium magnum</i>	WP_066624173.1
		<i>Clostridium niameyense</i>	WP_050607493.1
		<i>Clostridium novyi</i>	WP_039222089.1
		<i>Clostridium ragsdalei</i>	WP_065076642.1
		<i>Clostridium roseum</i>	WP_077834619.1
		<i>Clostridium sachharobutylicum</i>	WP_176127410.1
		<i>Clostridium sporogenes</i>	WP_003493044.1
		<i>Clostridium sulfidigenes</i>	WP_035131464.1
		<i>Clostridium tetanomorphum</i>	WP_035145723.1
		<i>Clostridium thermopalmarium</i>	WP_106023978.1
		<i>Clostridium thiosulfatireducens</i>	WP_035131464.1
		<i>Clostridium tyrobutyricum</i>	WP_058953124.1
		<i>Clostridium vincentii</i>	WP_106060669.1
<b>YhjR</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245806.1</b>
<b>YisJ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245291.1</b>
<b>YisY</b>	<b>14</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245141.1</b>
		<i>Clostridioides difficile</i>	WP_131042871.1
		<i>Clostridioides mangenotii</i>	WP_024621296.1
		<i>Clostridium acetobutylicum</i>	WP_010965976.1
		<i>Clostridium acidisoli</i>	WP_084115907.1
		<i>Clostridium akagii</i>	WP_026884581.1
		<i>Clostridium algidicarnis</i>	WP_029452637.1
		<i>Clostridium amazonitimonense</i>	WP_032123414.1
		<i>Clostridium amylolyticum</i>	WP_073007367.1
		<i>Clostridium arbusti</i>	WP_010235117.1
		<i>Clostridium argentinense</i>	WP_039633670.1
		<i>Clostridium autoethanogenum</i>	WP_023162110.1
		<i>Clostridium baratii</i>	WP_055225402.1
		<i>Clostridium beijerinckii</i>	AWK52867.1
		<i>Clostridium bornimense</i>	WP_044037511.1
		<i>Clostridium botulinum</i>	WP_030035239.1
		<i>Clostridium butyricum</i>	WP_163239861.1

<i>Clostridium carboxidivorans</i>	WP_007062592.1
<i>Clostridium carnis</i>	WP_125150051.1
<i>Clostridium cavendishii</i>	WP_072989296.1
<i>Clostridium celatum</i>	WP_005215433.1
<i>Clostridium cellulovorans</i>	WP_010073445.1
<i>Clostridium chromiireducens</i>	WP_079441729.1
<i>Clostridium colicanis</i>	WP_061859021.1
<i>Clostridium combesii</i>	WP_099837756.1
<i>Clostridium coskatii</i>	WP_063602631.1
<i>Clostridium cuniculi</i>	WP_133015041.1
<i>Clostridium cylindrosporium</i>	WP_048569161.1
<i>Clostridium diolis</i>	WP_087701023.1
<i>Clostridium disporicum</i>	WP_055264578.1
<i>Clostridium drakei</i>	WP_032076827.1
<i>Clostridium estertheticum</i>	WP_164959344.1
<i>Clostridium fallax</i>	WP_072892533.1
<i>Clostridium fessum</i>	WP_107001889.1
<i>Clostridium frigidicarnis</i>	WP_090043082.1
<i>Clostridium gasigenes</i>	WP_089966645.1
<i>Clostridium hydrogeniformans</i>	WP_027632054.1
<i>Clostridium ihumii</i>	WP_040328137.1
<i>Clostridium indicum</i>	WP_117416029.1
<i>Clostridium intestinale</i>	WP_021801624.1
<i>Clostridium isatidis</i>	WP_119864370.1
<i>Clostridium jeddahense</i>	WP_052335560.1
<i>Clostridium kluyveri</i>	WP_073537840.1
<i>Clostridium ljungdahlii</i>	WP_063555277.1
<i>Clostridium lundense</i>	MBE6075858.1
<i>Clostridium luticellari</i>	PRR82279.1
<i>Clostridium magnum</i>	KZL92524.1
<i>Clostridium merdae</i>	WP_085833938.1
<i>Clostridium minihomine</i>	WP_101696901.1
<i>Clostridium neonatale</i>	WP_159136022.1
<i>Clostridium nigeriense</i>	WP_066895209.1
<i>Clostridium oryzae</i>	WP_079422138.1
<i>Clostridium paraputrificum</i>	WP_055184143.1
<i>Clostridium pasteurianum</i>	WP_004455122.1
<i>Clostridium peptidivorans</i>	WP_097027105.1

		<i>Clostridium perfringens</i>	EGT3615270.1
		<i>Clostridium puniceum</i>	WP_077850122.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015392286.1
		<i>Clostridium sachharobutylicum</i>	WP_077864592.1
		<i>Clostridium sartagoforme</i>	WP_016206104.1
		<i>Clostridium saudiense</i>	WP_195953300.1
		<i>Clostridium scatologenes</i>	WP_029159849.1
		<i>Clostridium senegalense</i>	WP_010295774.1
		<i>Clostridium septicum</i>	WP_066678408.1
		<i>Clostridium sordellii</i>	WP_057535840.1
		<i>Clostridium sporogenes</i>	WP_163243826.1
		<i>Clostridium sulfidigenes</i>	WP_035131842.1
		<i>Clostridium tagluense</i>	WP_125001187.1
		<i>Clostridium tertium</i>	WP_111928094.1
		<i>Clostridium tetani</i>	WP_129009232.1
		<i>Clostridium tetanomorphum</i>	WP_035144291.1
		<i>Clostridium thermobutyricum</i>	WP_002597860.1
		<i>Clostridium thermopalmarium</i>	WP_061859021.1
		<i>Clostridium thiosulfatireducens</i>	WP_150843666.1
		<i>Clostridium tunisiense</i>	WP_017414341.1
		<i>Clostridium tyrobutyricum</i>	WP_017752349.1
		<i>Clostridium uliginosum</i>	WP_090088773.1
		<i>Clostridium vincentii</i>	WP_106060166.1
<b>YjcB</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_119122870.1</b>
<b>YjgC</b>	<b>37</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245240.1</b>
		<i>Clostridioides difficile</i>	WP_107618904.1
		<i>Clostridium aceticum</i>	WP_082058143.1
		<i>Clostridium aurantibutyricum</i>	OOM10823.1
		<i>Clostridium autoethanogenum</i>	WP_013238658.1
		<i>Clostridium baratii</i>	WP_045726402.1
		<i>Clostridium butyricum</i>	WP_071982856.1
		<i>Clostridium carboxidivorans</i>	WP_081457856.1
		<i>Clostridium chauvoei</i>	WP_096177137.1
		<i>Clostridium cochlearium</i>	WP_171303923.1
		<i>Clostridium colicanis</i>	KYH30252.1
		<i>Clostridium coskatii</i>	WP_082853556.1
		<i>Clostridium estertheticum</i>	WP_164956689.1
		<i>Clostridium fessum</i>	WP_107001304.1

		<i>Clostridium formicaceticum</i>	WP_081562178.1
		<i>Clostridium homopropionicum</i>	WP_052220419.1
		<i>Clostridium intestinale</i>	WP_073018572.1
		<i>Clostridium liquoris</i>	PRR77216.1
		<i>Clostridium ljungdahlii</i>	WP_013238658.1
		<i>Clostridium magnum</i>	WP_082831983.1
		<i>Clostridium niameyense</i>	WP_082174080.1
		<i>Clostridium novyi</i>	WP_011722328.1
		<i>Clostridium oryzae</i>	WP_079424239.1
		<i>Clostridium perfringens</i>	EGT3611827.1
		<i>Clostridium phoceensis</i>	WP_050625493.1
		<i>Clostridium ragsdalei</i>	AEI90726.1
		<i>Clostridium sachharobutylicum</i>	OOM09167.1
		<i>Clostridium septicum</i>	WP_066678626.1
		<i>Clostridium sordellii</i>	WP_054631313.1
		<i>Clostridium sporogenes</i>	WP_163234075.1
		<i>Clostridium tagluense</i>	WP_124997768.1
		<i>Clostridium tertium</i>	WP_195960025.1
		<i>Clostridium thermopalmarium</i>	PRR69366.1
		<i>Clostridium thiosulfatireducens</i>	WP_150843371.1
		<i>Clostridium tunisiense</i>	WP_017416926.1
<b>YjqC</b>	<b>9</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245071.1</b>
		<i>Clostridioides difficile</i>	VTR08525.1
		<i>Clostridium aceticum</i>	WP_044825040.1
		<i>Clostridium botulinum</i>	AVP59323.1
		<i>Clostridium perfringens</i>	WP_002286789.1
		<i>Clostridium sporogenes</i>	WP_003491163.1
		<i>Clostridium tetanomorphum</i>	WP_035144284.1
<b>YjzB</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003232972.1</b>
<b>YknT</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245018.1</b>
<b>YkuD</b>	<b>23</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_010886500.1</b>
		<i>Clostridium aceticum</i>	WP_044823018.1
		<i>Clostridium acetireducens</i>	WP_070109284.1
		<i>Clostridium acetobutylicum</i>	WP_200884624.1
		<i>Clostridium acidisoli</i>	WP_084113517.1
		<i>Clostridium akagii</i>	WP_084156586.1
		<i>Clostridium amazonitimonense</i>	WP_032120785.1
		<i>Clostridium amylolyticum</i>	WP_073010592.1



<i>Clostridium arbusti</i>	WP_010238280.1
<i>Clostridium argentinense</i>	WP_039636550.1
<i>Clostridium aurantibutyricum</i>	WP_176091530.1
<i>Clostridium autoethanogenum</i>	WP_041714307.1
<i>Clostridium beijerinckii</i>	WP_012058503.1
<i>Clostridium bornimense</i>	WP_044038603.1
<i>Clostridium botulinum</i>	NFA61018.1
<i>Clostridium bovifaecis</i>	QGU96116.1
<i>Clostridium butyricum</i>	KQB76707.1
<i>Clostridium cadaveris</i>	WP_027640158.1
<i>Clostridium carboxidivorans</i>	WP_007062366.1
<i>Clostridium cavendishii</i>	WP_072993460.1
<i>Clostridium chauvoei</i>	WP_161493114.1
<i>Clostridium cochlearium</i>	NMA58942.1
<i>Clostridium combesii</i>	WP_011987825.1
<i>Clostridium coskatii</i>	WP_063601483.1
<i>Clostridium cylindrosporum</i>	WP_048570260.1
<i>Clostridium diolis</i>	WP_012058503.1
<i>Clostridium dispericum</i>	WP_055263611.1
<i>Clostridium drakei</i>	WP_032079473.1
<i>Clostridium estertheticum</i>	WP_071613957.1
<i>Clostridium felsineum</i>	WP_077892789.1
<i>Clostridium formicaceticum</i>	WP_070966908.1
<i>Clostridium frigidicarnis</i>	WP_090038787.1
<i>Clostridium gasigenes</i>	WP_167867204.1
<i>Clostridium grantii</i>	WP_143160465.1
<i>Clostridium homopropionicum</i>	WP_052220537.1
<i>Clostridium jeddahense</i>	WP_169007863.1
<i>Clostridium kluveri</i>	WP_012102545.1
<i>Clostridium liquoris</i>	WP_106064236.1
<i>Clostridium ljungdahlii</i>	WP_063556053.1
<i>Clostridium lundense</i>	MBE6076977.1
<i>Clostridium magnum</i>	WP_066628868.1
<i>Clostridium niameyense</i>	WP_050606633.1
<i>Clostridium oryzae</i>	WP_079427409.1
<i>Clostridium paraputrificum</i>	WP_049177098.1
<i>Clostridium pasteurianum</i>	WP_015614485.1
<i>Clostridium peptidivorans</i>	WP_179632112.1

		<i>Clostridium polynesiense</i>	WP_040213872.1
		<i>Clostridium ragsdalei</i>	WP_065077789.1
		<i>Clostridium roseum</i>	WP_176091530.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_173696508.1
		<i>Clostridium sachharobutylicum</i>	WP_139355220.1
		<i>Clostridium scatologenes</i>	WP_029162832.1
		<i>Clostridium septicum</i>	WP_066678042.1
		<i>Clostridium sordellii*</i>	WP_055341535.1
		<i>Clostridium sporogenes</i>	WP_163205468.1
		<i>Clostridium tepidiprofundum</i>	WP_066826892.1
		<i>Clostridium tetanomorphum</i>	WP_035146433.1
		<i>Clostridium thermanum</i>	WP_163192972.1
		<i>Clostridium tunisiense</i>	WP_017415229.1
		<i>Clostridium tyrobutyricum</i>	WP_147565663.1
		<i>Clostridium uliginosum</i>	WP_090091784.1
<b>YkvP</b>	<b>46</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003245384.1</b>
		<i>Clostridium acetobutylicum</i>	WP_010965476.1
		<i>Clostridium aurantibutyricum</i>	WP_077835011.1
		<i>Clostridium autoethanogenum</i>	WP_023163520.1
		<i>Clostridium beijerinckii</i>	WP_052482980.1
		<i>Clostridium botulinum</i>	WP_012450335.1
		<i>Clostridium bovisfaecis</i>	QGU95067.1
		<i>Clostridium chromiireducens</i>	WP_119366452.1
		<i>Clostridium diolis</i>	WP_087701154.1
		<i>Clostridium drakei</i>	AWI06938.1
		<i>Clostridium estertheticum</i>	WP_071613463.1
		<i>Clostridium felsineum</i>	WP_077892715.1
		<i>Clostridium lundense</i>	WP_034868756.1
		<i>Clostridium magnum*</i>	WP_066618003.1
		<i>Clostridium oryzae</i>	WP_079428809.1
		<i>Clostridium peptidivorans</i>	WP_097028086.1
		<i>Clostridium ragsdalei</i>	WP_065078571.1
		<i>Clostridium roseum</i>	WP_077835011.1
		<i>Clostridium scatologenes</i>	WP_029162858.1
		<i>Clostridium sordellii</i>	WP_057537135.1
		<i>Clostridium sulfidigenes</i>	WP_035134086.1
		<i>Clostridium tertium</i>	WP_008680676.1
		<i>Clostridium tetanomorphum</i>	WP_173680516.1

		<i>Clostridium thiosulfatireducens</i>	WP_150843714.1
		<i>Clostridium tunisiense</i>	WP_017416461.1
<b>YkvQ</b>	<b>1</b>	<b><i>Bacillus subtilis</i></b>	<b>AYF10890.1</b>
		<i>Clostridium tepidiprofundum</i>	WP_066821749.1
<b>YkzQ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245197.1</b>
<b>YlbD</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003232233.1</b>
<b>YlbO</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003232210.1</b>
<b>YmaG</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003245252.1</b>
<b>YodL</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_004399431.1</b>
<b>YppG</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_004398696.1</b>
<b>YpzA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_004398863.1</b>
<b>YraD</b>	<b>32</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003246006.1</b>
		<i>Clostridium acetobutylicum</i>	WP_034581691.1
		<i>Clostridium argentinense</i>	ARC85726.1
		<i>Clostridium autoethanogenum</i>	WP_013238610.1
		<i>Clostridium beijerinckii</i>	AWK52857.1
		<i>Clostridium bovisfaecis</i>	QGU96020.1
		<i>Clostridium chromiireducens</i>	WP_160359313.1
		<i>Clostridium coskatii</i>	WP_063600006.1
		<i>Clostridium diolis</i>	WP_017208801.1
		<i>Clostridium formicaceticum</i>	WP_070972307.1
		<i>Clostridium ljungdahlii</i>	WP_013238610.1
		<i>Clostridium magnum</i>	WP_066622066.1
		<i>Clostridium oryzae</i>	WP_079425590.1
		<i>Clostridium pasteurianum</i>	WP_066020637.1
		<i>Clostridium sachharobutylicum</i>	WP_022747005.1
		<i>Clostridium tunisiense</i>	WP_017414978.1
		<i>Clostridium tyrobutyricum</i>	WP_017751649.1
<b>YraF</b>	<b>32</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_009967868.1</b>
		<i>Clostridium autoethanogenum</i>	WP_013238607.1
		<i>Clostridium beijerinckii</i>	WP_026886363.1
		<i>Clostridium bovisfaecis</i>	QGU96873.1
		<i>Clostridium chromiireducens</i>	WP_160359356.1
		<i>Clostridium coskatii</i>	WP_063600008.1
		<i>Clostridium diolis</i>	WP_026886363.1
		<i>Clostridium formicaceticum</i>	WP_070973439.1
		<i>Clostridium ljungdahlii</i>	WP_013238607.1

		<i>Clostridium magnum</i>	WP_082831889.1
		<i>Clostridium puniceum</i>	WP_077850047.1
		<i>Clostridium sachharobutylicum</i>	WP_022747008.1
		<i>Clostridium tunisiense</i>	WP_017414975.1
<b>YraG</b>	<b>50</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003229845.1</b>
		<i>Clostridium autoethanogenum</i>	WP_013238606.1
		<i>Clostridium beijerinckii</i>	WP_017208797.1
		<i>Clostridium bovifaecis</i>	QGU96017.1
		<i>Clostridium chromiireducens</i>	WP_160359316.1
		<i>Clostridium coskatii</i>	WP_013238606.1
		<i>Clostridium diolis</i>	WP_017208797.1
		<i>Clostridium formicaceticum</i>	WP_070972298.1
		<i>Clostridium ljungdahlii</i>	WP_013238606.1
		<i>Clostridium magnum</i>	WP_066622062.1
		<i>Clostridium puniceum</i>	WP_077850046.1
		<i>Clostridium sachharobutylicum</i>	WP_041716283.1
		<i>Clostridium tunisiense</i>	WP_017414974.1
<b>YrbC</b>	<b>6</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_004398802.1</b>
		<i>Clostridioides difficile</i>	WP_021383652.1
		<i>Clostridioides manganotii</i>	WP_027702612.1
		<i>Clostridium aceticum</i>	WP_044823803.1
		<i>Clostridium acetireducens</i>	WP_070111012.1
		<i>Clostridium acetobutylicum</i>	WP_010965592.1
		<i>Clostridium acidisoli</i>	WP_084114670.1
		<i>Clostridium akagii</i>	WP_026884393.1
		<i>Clostridium algidicarnis</i>	WP_104408947.1
		<i>Clostridium amazonitimonense</i>	WP_032121891.1
		<i>Clostridium amylolyticum</i>	WP_073004630.1
		<i>Clostridium arbusti</i>	WP_010234952.1
		<i>Clostridium argentinense</i>	WP_039631293.1
		<i>Clostridium aurantibutyricum</i>	WP_077850756.1
		<i>Clostridium autoethanogenum</i>	WP_013240015.1
		<i>Clostridium baratii</i>	WP_039316454.1
		<i>Clostridium beijerinckii</i>	WP_173708874.1
		<i>Clostridium bornimense</i>	WP_044038919.1
		<i>Clostridium botulinum</i>	KEH94372.1
		<i>Clostridium bovifaecis</i>	QGU95015.1
		<i>Clostridium butyricum</i>	MBE6072698.1

<i>Clostridium cadaveris</i>	WP_178312207.1
<i>Clostridium carboxidivorans</i>	WP_007062446.1
<i>Clostridium carnis</i>	WP_125150137.1
<i>Clostridium cavendishii</i>	WP_072984136.1
<i>Clostridium celatum</i>	WP_005213983.1
<i>Clostridium cellulovorans</i>	WP_010076866.1
<i>Clostridium chauvoei</i>	WP_021876003.1
<i>Clostridium chromiireducens</i>	WP_160357942.1
<i>Clostridium cochlearium</i>	WP_089865447.1
<i>Clostridium colicanis</i>	WP_061857017.1
<i>Clostridium collagenovorans</i>	WP_072832666.1
<i>Clostridium combesii</i>	WP_003360098.1
<i>Clostridium coskatii</i>	WP_013240015.1
<i>Clostridium cuniculi</i>	WP_195469372.1
<i>Clostridium cylindrosporum</i>	WP_048570702.1
<i>Clostridium diolis</i>	WP_012060379.1
<i>Clostridium disporicum</i>	WP_042393627.1
<i>Clostridium drakei</i>	WP_032077159.1
<i>Clostridium estertheticum</i>	WP_165413410.1
<i>Clostridium fallax</i>	WP_072893276.1
<i>Clostridium felsineum</i>	WP_077835975.1
<i>Clostridium fessum</i>	WP_022360132.1
<i>Clostridium formicaceticum</i>	WP_070969088.1
<i>Clostridium frigidicarnis</i>	WP_090038299.1
<i>Clostridium gasigenes</i>	WP_185165667.1
<i>Clostridium grantii</i>	WP_073337315.1
<i>Clostridium haemolyticum</i>	WP_039228725.1
<i>Clostridium homopropionicum</i>	WP_052220271.1
<i>Clostridium hydrogeniformans</i>	WP_027634057.1
<i>Clostridium ihumii</i>	WP_040330229.1
<i>Clostridium indicum</i>	WP_117418363.1
<i>Clostridium intestinale</i>	WP_073020012.1
<i>Clostridium isatidis</i>	WP_119864667.1
<i>Clostridium jeddahense</i>	WP_042431100.1
<i>Clostridium kluveri</i>	WP_073539987.1
<i>Clostridium liquoris</i>	WP_106064731.1
<i>Clostridium ljungdahlii</i>	WP_063556004.1
<i>Clostridium lundense</i>	WP_027626635.1

<i>Clostridium luticellari</i>	WP_106009862.1
<i>Clostridium magnum</i>	WP_066618182.1
<i>Clostridium massiliodielmoense</i>	WP_003368176.1
<i>Clostridium mediterraneense</i>	WP_066872663.1
<i>Clostridium merdae</i>	WP_085832987.1
<i>Clostridium minihomine</i>	WP_101698423.1
<i>Clostridium neonatale</i>	WP_058296249.1
<i>Clostridium niameyense</i>	WP_050606749.1
<i>Clostridium nigeriense</i>	WP_066894089.1
<i>Clostridium novyi</i>	WP_011721897.1
<i>Clostridium oryzae</i>	WP_079422504.1
<i>Clostridium paraputrificum</i>	WP_049177181.1
<i>Clostridium pasteurianum</i>	WP_015616126.1
<i>Clostridium peptidivorans</i>	WP_097026038.1
<i>Clostridium perfringens</i>	WP_002290927.1
<i>Clostridium phoceensis</i>	WP_050624646.1
<i>Clostridium polynesiense</i>	WP_040211477.1
<i>Clostridium puniceum</i>	WP_077848875.1
<i>Clostridium putrefaciens</i>	WP_115641368.1
<i>Clostridium ragsdalei</i>	WP_065077738.1
<i>Clostridium roseum</i>	WP_077835975.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394532.1
<i>Clostridium sachharobutylicum</i>	WP_077867156.1
<i>Clostridium sartagoforme</i>	WP_016208436.1
<i>Clostridium saudiiense</i>	WP_042393627.1
<i>Clostridium scatologenes</i>	WP_046066048.1
<i>Clostridium senegalense</i>	WP_061993940.1
<i>Clostridium septicum</i>	WP_066678645.1
<i>Clostridium sordellii</i>	WP_057574184.1
<i>Clostridium sporogenes</i>	WP_045898722.1
<i>Clostridium sulfidigenes</i>	MBE6061739.1
<i>Clostridium taeniosporum</i>	WP_069679207.1
<i>Clostridium tagluense</i>	WP_125003173.1
<i>Clostridium tarantellae</i>	WP_152888168.1
<i>Clostridium tepidiprofundii</i>	WP_066823180.1
<i>Clostridium tepidum</i>	WP_078024422.1
<i>Clostridium tertium</i>	WP_008679466.1
<i>Clostridium tetani</i>	WP_129029089.1

		<i>Clostridium tetanomorphum</i>	WP_035144189.1
		<i>Clostridium thermarum</i>	WP_139904383.1
		<i>Clostridium thermobutyricum</i>	WP_002597890.1
		<i>Clostridium thermopalmarium</i>	WP_061857017.1
		<i>Clostridium thiosulfatireducens</i>	WP_150844466.1
		<i>Clostridium transplantifaecale</i>	WP_125139987.1
		<i>Clostridium tunisiense</i>	WP_017414659.1
		<i>Clostridium tyrobutyricum</i>	WP_017752834.1
		<i>Clostridium uliginosum</i>	WP_090092380.1
		<i>Clostridium ventriculi</i>	WP_055259267.1
		<i>Clostridium vincentii</i>	WP_106058569.1
<b>YsnD</b>		<b><i>Bacillus subtilis</i></b>	<b>SPU02514.1</b>
<b>YsxE</b>		<b><i>Bacillus subtilis</i></b>	<b>TDY55031.1</b>
<b>YtdA</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003229044.1</b>
<b>YtxO</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_004399071.1</b>
<b>YusA</b>	<b>11</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003228595.1</b>
		<i>Clostridioides difficile</i>	WP_021384237.1
		<i>Clostridioides mangenotii</i>	WP_024620043.1
		<i>Clostridium aceticum</i>	WP_044823223.1
		<i>Clostridium acetireducens</i>	WP_070110794.1
		<i>Clostridium acetobutylicum</i>	WP_010964304.1
		<i>Clostridium acidisoli</i>	WP_084115958.1
		<i>Clostridium akagii</i>	WP_026882844.1
		<i>Clostridium algidicarnis</i>	WP_029451728.1
		<i>Clostridium amazonitimonense</i>	WP_032123335.1
		<i>Clostridium amylolyticum</i>	WP_073003875.1
		<i>Clostridium arbusti</i>	WP_010239785.1
		<i>Clostridium argentinense</i>	WP_039635089.1
		<i>Clostridium aurantibutyricum</i>	WP_077834360.1
		<i>Clostridium autoethanogenum</i>	WP_063600130.1
		<i>Clostridium baratii</i>	WP_055207613.1
		<i>Clostridium beijerinckii</i>	WP_017212472.1
		<i>Clostridium bornimense</i>	WP_044036549.1
		<i>Clostridium botulinum</i>	WP_061328111.1
		<i>Clostridium bovisfaecis</i>	QGU94891.1
		<i>Clostridium butyricum</i>	MBE6062321.1
		<i>Clostridium cadaveris</i>	WP_027639453.1

<i>Clostridium carboxidivorans</i>	WP_007061360.1
<i>Clostridium carnis</i>	WP_125149318.1
<i>Clostridium cavendishii</i>	WP_072984660.1
<i>Clostridium celatum</i>	WP_005214597.1
<i>Clostridium cellulovorans</i>	WP_010074492.1
<i>Clostridium chauvoei</i>	WP_021876351.1
<i>Clostridium chromiireducens</i>	WP_160360822.1
<i>Clostridium cochlearium</i>	WP_096635683.1
<i>Clostridium colicanis</i>	WP_061858294.1
<i>Clostridium collagenovorans</i>	WP_072831452.1
<i>Clostridium combesii</i>	WP_099837393.1
<i>Clostridium coskatii</i>	WP_063600130.1
<i>Clostridium cuniculi</i>	WP_133015896.1
<i>Clostridium diolis</i>	WP_011967986.1
<i>Clostridium disporicum</i>	WP_055268334.1
<i>Clostridium drakei</i>	WP_032075380.1
<i>Clostridium estertheticum</i>	WP_164958168.1
<i>Clostridium felsineum</i>	WP_077834360.1
<i>Clostridium fessum</i>	WP_106999986.1
<i>Clostridium formicaceticum</i>	WP_070966119.1
<i>Clostridium frigidicarnis</i>	SFB32328.1
<i>Clostridium gasigenes</i>	WP_167865722.1
<i>Clostridium grantii</i>	WP_073335891.1
<i>Clostridium homopropionicum</i>	WP_052219747.1
<i>Clostridium hydrogeniformans</i>	WP_027633312.1
<i>Clostridium ihumii</i>	WP_034440284.1
<i>Clostridium indicum</i>	WP_117418128.1
<i>Clostridium intestinale</i>	WP_181601263.1
<i>Clostridium isatidis</i>	WP_119865948.1
<i>Clostridium jeddahense</i>	WP_009059800.1
<i>Clostridium khuyveri</i>	WP_073539762.1
<i>Clostridium liquoris</i>	WP_106064133.1
<i>Clostridium ljungdahlii</i>	WP_063554351.1
<i>Clostridium lundense</i>	WP_027625479.1
<i>Clostridium luticellari</i>	WP_106010746.1
<i>Clostridium magnum</i>	WP_066625718.1
<i>Clostridium massiliodiemoense</i>	WP_039283479.1
<i>Clostridium mediterraneense</i>	WP_066868954.1



<i>Clostridium merdae</i>	WP_085832222.1
<i>Clostridium minihomine</i>	WP_101698460.1
<i>Clostridium neonatale</i>	WP_058294075.1
<i>Clostridium nigeriense</i>	WP_066895458.1
<i>Clostridium novyi</i>	WP_039254493.1
<i>Clostridium oryzae</i>	WP_079422481.1
<i>Clostridium paraputrificum</i>	WP_055253302.1
<i>Clostridium pasteurianum</i>	WP_066020238.1
<i>Clostridium peptidivorans</i>	WP_097028108.1
<i>Clostridium perfringens</i>	WP_002291174.1
<i>Clostridium polynesiense</i>	WP_082023828.1
<i>Clostridium puniceum</i>	WP_077846571.1
<i>Clostridium putrefaciens</i>	WP_115642328.1
<i>Clostridium ragsdalei</i>	WP_065076715.1
<i>Clostridium roseum</i>	WP_077834360.1
<i>Clostridium saccharoperbutylacetonicum</i>	WP_015395155.1
<i>Clostridium sachharobutylicum</i>	WP_022749511.1
<i>Clostridium sartagofforme</i>	WP_136006026.1
<i>Clostridium saudicense</i>	WP_042400630.1
<i>Clostridium scatologenes</i>	WP_029160451.1
<i>Clostridium senegalense</i>	WP_199868788.1
<i>Clostridium septicum</i>	WP_066673359.1
<i>Clostridium sporogenes</i>	WP_061328111.1
<i>Clostridium sulfidigenes</i>	WP_035129346.1
<i>Clostridium taeniosporum</i>	WP_069678491.1
<i>Clostridium tagluense</i>	WP_125002493.1
<i>Clostridium tepidum</i>	WP_078024833.1
<i>Clostridium tertium</i>	WP_008676805.1
<i>Clostridium tetani</i>	RX150316.1
<i>Clostridium tetanomorphum</i>	WP_035146380.1
<i>Clostridium thermarum</i>	WP_163192474.1
<i>Clostridium thermobutyricum</i>	WP_195971294.1
<i>Clostridium thermopalmarium</i>	MBE6044798.1
<i>Clostridium thiosulfatireducens</i>	WP_150844937.1
<i>Clostridium transplantifaecale</i>	WP_125141622.1
<i>Clostridium tyrobutyricum</i>	WP_017750550.1
<i>Clostridium uliginosum</i>	WP_090088195.1
<i>Clostridium vincentii</i>	WP_106059833.1

<b>YusN</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003228564.1</b>
<b>YuzC</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003243784.1</b>
<b>YvdP</b>	<b>30</b>	<b><i>Bacillus subtilis</i></b>	<b>WP_003228217.1</b>
		<i>Clostridioides difficile</i>	KAA2292717.1
		<i>Clostridioides mangenotii</i>	WP_024621809.1
		<i>Clostridium akagii</i>	WP_026884111.1
		<i>Clostridium argentinense</i>	WP_039635334.1
		<i>Clostridium baratii</i>	WP_045725328.1
		<i>Clostridium beijerinckii</i>	WP_077838472.1
		<i>Clostridium botulinum</i>	WP_061318518.1
		<i>Clostridium butyricum</i>	MBE6072063.1
		<i>Clostridium carnis</i>	WP_125149036.1
		<i>Clostridium cavendishii</i>	SHJ05966.1
		<i>Clostridium celatum</i>	WP_005215326.1
		<i>Clostridium chauvoei</i>	WP_021875136.1
		<i>Clostridium chromiireducens</i>	WP_079442221.1
		<i>Clostridium combesii</i>	WP_099839203.1
		<i>Clostridium coskatii</i>	WP_063600157.1
		<i>Clostridium cuniculi</i>	WP_195964204.1
		<i>Clostridium diolis</i>	WP_105411390.1
		<i>Clostridium disporicum</i>	WP_055264941.1
		<i>Clostridium drakei</i>	WP_032076765.1
		<i>Clostridium estertheticum</i>	WP_171295867.1
		<i>Clostridium frigidicarnis</i>	WP_090040905.1
		<i>Clostridium gasigenes</i>	WP_185165050.1
		<i>Clostridium homopropionicum</i>	WP_052219711.1
		<i>Clostridium hydrogeniformans</i>	WP_027634426.1
		<i>Clostridium indicum</i>	WP_117417464.1
		<i>Clostridium intestinale</i>	WP_021800754.1
		<i>Clostridium isatidis</i>	WP_119865308.1
		<i>Clostridium jeddahense</i>	WP_194955938.1
		<i>Clostridium mediterraneense</i>	WP_066875225.1
		<i>Clostridium merdae</i>	WP_143750791.1
		<i>Clostridium neonatale</i>	WP_159115969.1
		<i>Clostridium nigeriense</i>	WP_066892344.1
		<i>Clostridium paraputrificum</i>	WP_195260357.1
		<i>Clostridium pasteurianum</i>	WP_015615019.1
		<i>Clostridium perfringens</i>	HAT4246535.1

		<i>Clostridium puniceum</i>	OOM70324.1
		<i>Clostridium saccharoperbutylacetonicum</i>	WP_015394465.1
		<i>Clostridium sartagoforme</i>	WP_016208267.1
		<i>Clostridium saudiense</i>	WP_042395014.1
		<i>Clostridium senegalense</i>	WP_199869021.1
		<i>Clostridium septicum</i>	WP_066678435.1
		<i>Clostridium sordellii</i>	WP_077152469.1
		<i>Clostridium sporogenes</i>	WP_072585584.1
		<i>Clostridium tarantellae</i>	WP_152888450.1
		<i>Clostridium tertium</i>	WP_008677950.1
		<i>Clostridium thermobutyricum</i>	WP_080022795.1
		<i>Clostridium thiosulfatireducens</i>	WP_150842965.1
		<i>Clostridium uliginosum</i>	WP_175559928.1
<b>YwcE</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003227411.1</b>
<b>YwqH</b>		<b><i>Bacillus subtilis</i></b>	<b>AFQ59472.1</b>
<b>YwrJ</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003242695.1</b>
<b>YxeE</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003227093.1</b>
<b>YxeF</b>		<b><i>Bacillus subtilis</i></b>	<b>WP_003244165.1</b>
<b>YybI</b>	<b>25</b>	<b><i>Bacillus subtilis</i></b>	WP_003244492.1
		<i>Clostridium acetobutylicum</i>	WP_200884628.1
		<i>Clostridium algidicarnis</i>	WP_104409654.1
		<i>Clostridium amylolyticum</i>	WP_073006796.1
		<i>Clostridium arbusti</i>	WP_010233534.1
		<i>Clostridium argentinense</i>	WP_039632203.1
		<i>Clostridium aurantibutyricum</i>	WP_077852169.1
		<i>Clostridium autoethanogenum</i>	WP_013238049.1
		<i>Clostridium beijerinckii</i>	AWK51702.1
		<i>Clostridium bornimense</i>	WP_051483645.1
		<i>Clostridium botulinum</i>	WP_191591225.1
		<i>Clostridium bovisfaecis</i>	QGU95789.1
		<i>Clostridium carboxidivorans</i>	WP_007058996.1
		<i>Clostridium cavendishii</i>	WP_072985059.1
		<i>Clostridium celatum</i>	WP_195244359.1
		<i>Clostridium chromiireducens</i>	WP_079439429.1
		<i>Clostridium colicanis</i>	WP_061859018.1
		<i>Clostridium collagenovorans</i>	WP_072830268.1
		<i>Clostridium combesii</i>	WP_099839033.1

<i>Clostridium coskatii</i>	WP_063600249.1
<i>Clostridium cuniculi</i>	WP_195417761.1
<i>Clostridium cylindrosporium</i>	WP_048569114.1
<i>Clostridium disporicum</i>	WP_055264129.1
<i>Clostridium estertheticum</i>	WP_164955649.1
<i>Clostridium fallax</i>	WP_083573481.1
<i>Clostridium felsineum</i>	WP_077894893.1
<i>Clostridium formicaceticum</i>	WP_070963508.1
<i>Clostridium frigidicarnis</i>	WP_090038917.1
<i>Clostridium grantii</i>	SHH90998.1
<i>Clostridium homopropionicum</i>	WP_052221871.1
<i>Clostridium hydrogeniformans</i>	WP_051623693.1
<i>Clostridium liquoris</i>	WP_106064537.1
<i>Clostridium ljungdahlii</i>	WP_013238049.1
<i>Clostridium lundense</i>	MBE6067185.1
<i>Clostridium magnum</i>	WP_066620808.1
<i>Clostridium pasteurianum</i>	WP_003441698.1
<i>Clostridium peptidivorans</i>	WP_097027962.1
<i>Clostridium perfringens</i>	EGT3616326.1
<i>Clostridium puniceum</i>	WP_077847112.1
<i>Clostridium putrefaciens</i>	WP_115640359.1
<i>Clostridium ragsdalei</i>	WP_065077375.1
<i>Clostridium roseum</i>	WP_077832950.1
<i>Clostridium sartagoforme</i>	WP_016206308.1
<i>Clostridium septicum</i>	WP_083089474.1
<i>Clostridium sporogenes</i>	WP_163238273.1
<i>Clostridium sulfidigenes</i>	WP_035134101.1
<i>Clostridium tagluense</i>	WP_125004664.1
<i>Clostridium tarantellae</i>	WP_152888954.1
<i>Clostridium tepidum</i>	WP_078022961.1
<i>Clostridium tertium</i>	WP_008678444.1
<i>Clostridium tetani</i>	WP_035141659.1
<i>Clostridium tetanomorphum</i>	WP_035144259.1
<i>Clostridium thermarum</i>	WP_139906494.1
<i>Clostridium thermopalmarium</i>	WP_061859018.1
<i>Clostridium thiosulfatireducens</i>	WP_150842609.1
<i>Clostridium tunisiense</i>	WP_017414216.1

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*Clostridium uliginosum*

WP\_090091706.1

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\* missed by BLASTp/MCL search protocol conducted in **Chapter 3**; but found on UniProt