

Supplementary Table 1. Overgo probes used for library screening.

Gene	Overgo	Gene	Overgo
LSM	F- CTCAACATCAAACCTAACAGATATC R-CTGGGTCTGTAACTGATATCTG	NRM	F- TCTCCCCCATCATAAGATTCTCG R- AGTCAGCCATTCCTGTGCGAGAATC
RING1	F- CTCTCCAAGTACTTGGCTCTAAGG R- TCCGCTCAAGTGCAATCCTTAGAG	TAPBP	F- TGGTCTAACCCCTGAACCTTACTC R- ATCCAATGACCGAGGAGAGTAAGG
APOM	F- TGTGTACCCCGAGAATGGACTTAC R- TCCCTTCAGTCAGATGGTAAGTCC	DOM3Z	F- GAACTTCTGTGCTGCTTTCCTCAG R- TGTGCTTTGGGCAAAGCTGAGGAA
RGL2	F- TTCCAGACTAGAGACCCTAGAGTC R-ATCATCACAAGGCCTGGACTCTAG	NOTCH4	F- TGCTAGTTGCCCATCCCCAAGAAG R- TAGCATCTACCTGTGCCTTCTTGG
PBX	F- ACTCCATTGAGCACTCCGACTATC R- TGGGCCAGTTTACTTCGATAGTCG	BF	F- ATTTGGAATTGGGCCCTGGTAGA R-GTTGATCTTCTCCTCGTCTACCAG
CREBL1	F- ACTTCCAGACCTACAGGTGAAGTC R-TGGGGAAGAAGGTTCTGACTTCAC	RDBP	F- GGACCAAGGTAGAATCTGTGCAAC R- GCGATGCTAACCTTGAGTTGCACA
PHF	F- TGCTGGGGATGAAGCTGTCTTTGC R- CCCTTCAGTCCATATGGCAAAGAC	PSMB9	F- GCAGTGGAGTTTGATGGTGGTGTGTC R- AATCAGAACCACCACGACACCAC
SKIV2L	F- CTCGACCTTACTACTAGTTCTGAG R- GGTGGATCTCACTCTTCTCAGAAC	BRD2	F- GTCTCACACACCTTTGTATTCCCC R- GGAATCTCAGGTGATGGGGAATA
TAP1	F- AAAGGGCTGACCACATACTTCC R- ATGACCCCTCCTCTAGGAAGAGT	SYNGAP1	F- CTGCACAAGTAGTCTCAGACATCAC R- CTTCTGTTCTGGCTCAGTGATGTC
TAP2B	F- ATGGGAAGCCCTTGGTTGAGTACC R- TGCAGGTATTGGTGCTGGTACTCA	CLIC1	F- TTCTATCCCAGAGGAGTTTCGAGG R- CAGGTATCTTTGCACCCCTCGAAA
VPS52	F- CCTCATGACTTCTCTCTGGGTCTA R- TTGCCTGAATGTGAACTAGACCCA	NEU1	F- TTCCACCATGCTGGTGTGGAGCAA R- AGTGATGCCATCATCCTTGCTCCA
POU5F1	F-GCAAACGCAGCAATAGCAACTCAC R- TCGAAATCTTCTCGGGGTGAGTTG	MRPS18B	F- AGTTGGAGGCAACAACCTCGATACC R- GTCTCTTCTGGCATGTGGTATCGA
CDSN	F- CCTCCTCCAATTCCTATGGTAGCT R- CCACCTACCCTTCATAGCTACCA	DHX16	F- GCTGTTCCAGAGGAGATCCTTACAG R- GATAACATGGCAGCCACTGTAAGG
TCF19	F-TGGGAAGGGTGGAGATCTCTATAC R-TGGGAGGGTGAAAAGTATAGAG	ABCF1	F- AGAACCAGGATGAGGAGGCACAAG R- AAAAGCTCAGGTGCCTCTTGTGCC
KIFC	F- CTGGATGATTACCCTGTGTGCATC R-TCTGGCCATAGGCAAAGATGCACA	GNL1	F- ACCCACTGTTCCGGCTTTGTGACTG R- AAAGATAAGGCCAGGGCAGTCACA
RXRB	F- TATCTCTCTGATCCCCATCTCCT RGGCAAAAGAGAGGAAGAGGAGAT	RPS18	F- AGTGCTCAACACCAACATTGACGG R- AGCTATTTTCCGCCGTCGTCAT
Vars2L	F- CATCATCTTGTCCAGTGTGTTGTC R- TTGGGCTCTGAACATTGCAACAAC	B3GALT4	F- CTTATGGTTCAGGCACTGGCTATG R- ACTGGGGCTGATAACACATAGCCA
FLOT1	F-TAAGCCACCTGCCAAATTGTGTGG R-ACACCTGTGAGCTTCTCCACACAA	ZNF297	F- AGCTGAGTGATGATGGAGGGGATG R- ACTACTACCCCAACTCCATCCCCT
ZBTB12	F-GCCTAAAAGAGGATGGAGTCAGTG R-GTCAATCCAATCCCTCCACTGACT	DMA	F- CTGATGTCTTTGGTCCATCTTCCC R- TGATGCCAACACTGCTGGGAAGAT
BAT8	F- AAAGCGGAAACGATGAGGCTTTC R- CAGAGCTACTCTGCTAGAAAGCCT	DMB	F- CCCACAGGACACGTAAGAAGGAAG R- TTTCTTTCTGCAGCCCCTTCCTTC
SLC44A	F- CAGGTCTAACTTGCCAGTTCCTAG R-CCTGAAGAGGAGTAACCTAGGAAC	DXA	F- AGTGAGTTACCTCACCTTCATCCC R- GACACCTTCAGTGGGAAGGGATGAA
MOG	F- GAGTGGTTCACCTCTACCGAAATG R-CCATCTTGATCCTTCCCATTTCGG	DCA	F- GAGTTTGGCCGTATCTTCAGTCC R- GCCCAATCTGTGCATTGGAAGTGA
GABBR1	F- TGCTGTCACAGATGCTTAGCTTCA R- CATTCCCCTAAAGAGATGAAGCTA	DCB	F- GAGGAGATGTCTTTGCTTGCCATG R- AAGCTGACATGGTCCACATGGCAA
RPP21	F- CTGGCGAGGTTTTACTGCCACACG R- TGCCGATGGTCTTTCCGTGTGGC	SLC39A7	F- GCACTCCCATGAAGATTTCCAGCA R- GCACTCCCATGAAGATTTCCAGCA
C4B	F- TCTGAGGATGTGTCTTTACCCTG R- AGTCATGGTCAGAGTCCAGGGTAA	155P10sp6	F-TGCCCTGACACATACTGGCTTTG R- GACTTACCCAGGGTAACAAAGCCA
146G20sp6	F- CTTGGCATATGGTGTAAAGATGGTG R- GCAATGAGGCATAGACCACCATCT	178C11sp6	F- AATTGATGCCATCTGAAGTTATTG R- GCCCAATTCACAACAGCAATAACT

201022sp6	F- TGTTAGTGAGGCAGTGAGGATGCC R- CTATACCAACCACCTGGGCATCCT	242G6sp6	F- GTGTGGCCATAAACTCTGGTGTTT R- GCAAGGAAGAGCACTAGAACACCA
243m2sp6	F- AGTTCCAGACTTGCCTGTGGATTC R- CAACACGTAGGACTTCGAATCCAC	244N6sp6	F- TCAAACACCTAGGGACGTACTGAG R- GGAAGCAGCAGTGTAACTCAGTAC
180L7t7	F- CAGCAAAGACTGATGGCATTTCATC R- CCCTCTCAGTAAGTAGGATGAATG	242G6t7	F- ACAGAAAGCAGGCAGAACTGAAGG R- CTGCTTCCTGCTTTCTCCTTCAGT
243m2t7	F- CCAGGGCTATGCGAATGAGGTTTC R- CAGGATTCCTCTACAGGAAACCTC		