

Supplementary Table S2:

List of oligonucleotide sequences of guide DNAs and gRNA target sites

Oligonucleotide sequences of 21-nt guide DNAs (hTtAgo)

gDNAs are 5'-phosphorylated (5'-p)

Forward (FW) guides (5'-3')

RPL13A site1	5'-p-CAGAACGCTTCGACCAATGAA
RPL13A site2	5'-p-CTGACTGGGCCTGCTATCTGT
RAB1A site1	5'-p-ACTTTCCAACCCCTGAGTCGC
RAB1A site2	5'-p-CGAGCTGAGGACAGACAGTGC
NPAS1	5'-p-CAAGGCCTCAGGGTACAAGGT
NFE2L1	5'-p-CAGACCCAGTTCACAACCTG

Reverse (RV) guides (5'-3')

RPL13A site1	5'-p-TTCATTGGTTCGAAGCGTTCTG
RPL13A site2	5'-p-ACAGATAGCAGGCCCAGTCAG
RAB1A site1	5'-p-GCGACTCAGGGGTGGAAAGT
RAB1A site2	5'-p-GCACTGTCTGTCCCTCAGCTCG
NPAS1	5'-p-ACCTTGTACCCTGAGGCCTTG
NFE2L1	5'-p-CAGGTTGTGGAAGTGGGTCTG

15-nt spaced Reverse (15-nt RV) guides (5'-3')

RPL13A site1	5'-p-TGACGCAACGCGGTTGCGCGG
RPL13A site2	5'-p-TCGCTTGGTTTTGTGGGGCAG
RAB1A site1	5'-p-TTTGCAGTGATTATTTATTCA
RAB1A site2	5'-p-GGCGCTTGGCGGGAAGCTGAG
NPAS1	5'-p-GGCTCCTGTATTCCAGGCAGC
NFE2L1	5'-p-CTTGGGGTGGATACCATAGCC

Oligonucleotide sequences of 21-nt (hTtAgo) and 24-nt (hNgAgo) guide DNAs

gDNAs are 5'-phosphorylated

RPL13A site2 (hTtAgo)	5'-p-TCAGATAGCAGGCCCAGTCAG
RPL13A site2 (hNgAgo)	5'-p-GTGACAGATAGCAGGCCCAGTCAG
HER2 (hTtAgo)	5'-p-TTTGTTGGAATGCAGTTGGAG
HER2 (hNgAgo)	5'-p-AGACTTGTGGAATGCAGTTGGAG
G5 (hNgAgo)	5'-p-CCTACCAGAATCGCCCAGTGGCTG

Oligonucleotide sequences of gRNA target sites (SpCas9)

PAM sequence (5'-NGG-3') is underlined

RPL13A 2-1	CCTTATGAGGCCCTCTGACT <u>TGG</u>
RPL13A 2-2	AGATAGCAGGCCCAGTCAG <u>AGG</u>
HER2	GTTGGAATGCAGTTGGAG <u>GGG</u>