

Table 5 – List of primers and oligos

Legend

Fw	Forward primer
Rv	Reverse primer
Ta	Annealing temperature used in the PCR reaction
WT	Wild type (amplification of the wt 3'UTR of interest)
MUT frg	Mutated fragments (primers used to amplify fragments of 3'UTR mutating the miR-181a-5p responsive elements), fragments were then joint by OE-PCR before cloning
MUT Q5	Primers used to mutate plasmid with Q5 mutagenesis kit (NEB)
MO	Morpholino

Oligo Name	Ta	Sequence (5'→3')	Used for
Dicer_HA_Fw	60	AAGAAACACTGGATGATTGAAAAGC	mice genotyping
Dicer_HA_Rv	60	AAGAAAGGACCCATTGGTGAGG	mice genotyping
MAP2_Fw	60	CACGTACTCCTGGAACACCC	axonal purity test
MAP2_Rv	60	TGGAACCACAACGAGACTGA	axonal purity test
H4_Fw	60	GGCAAAGGAGGAAAAGGACT	axonal purity test
H4_Rv	60	GAGAGCGTACCCACATCCA	axonal purity test
ACTB_Fw	60	CGTAAGGACCTCTATGCCAA	axonal purity test
ACTB_Rv	60	TGCATTGATGACCATACAGTG	axonal purity test
U6_Fw	60	CTCGCTTCGGCAGCACA	pre-miRNAs amplification
U6_Rv	60	AACGCTTCACGAATTTGCCG	pre-miRNAs amplification
pre-miR-181a-1/a-2_Fw	60	GAACATTCAACGCTGTCGGTG	pre-miRNAs amplification
pre-miR-181a-2_Rv	60	TCAACGGCCGATGGTTTACA	pre-miRNAs amplification
pre-miR-181a-1-4L_Rv	60	GATCGATGGTTTGCCTTCAGA	pre-miRNAs amplification
pre-miR-181a-1_4S_Rv	60	ACGATCGATGGTTTGCCTTTAG	pre-miRNAs amplification
pre-miR-182_Fw	60	TGGCAATGGTAGAACTCACAC	pre-miRNAs amplification
pre-miR-182_Rv	60	GCAAGTCTAGAACCACCGGAT	pre-miRNAs amplification
pre-miR-181a-1_T7_Fw	12	TAATACGACTCACTATAGAACATTTCAACGCTGTCGGTGAGTTGGTATCTAAAGGC	in vitro synthesis
pre-miR-181a-1_Rv	12	TGTACAGTCAACGATCGATGGTTTGCCTTTAGATACCAAACCTCACCG	in vitro synthesis

CLONING (wild type and mutated fragments of TUBB3, APP, THBS1 3'UTR)

Oligo Name	Ta	Sequence (5'→3')	3'UTR PCR amplification of
APP_Fw	66	GTACAAGTAATCTAGACCCCGGGAGCCTCTCGAATC	WT
APP_Rv	66	CATGTCTGGATCTACGTAATTTTCAACAGCTGGGCAC	WT
TUBB3_Fw	68	GTACAAGTAATCTAGAAGGAACCCACTGCAAAGCCAGAG	WT
TUBB3_Rv	68	GTATCTTATCATGTCTGGATCTACGTAATAAATACAGTACTCTGCATCTGAACCTGTGC	WT
THBS1_Fw	55	CGGCATGGACGAGCTGTACAAGTAATCTAGATCCAGAAGTTCTTATTCCATG	WT
THBS1_Rv	55	GTATCTTATCATGTCTGGATCTACGTAATTTTAAATAGTTTATTTTTTATATTTTAC	WT
APP_Fw	68	GTACAAGTAATCTAGACCCCGGGAGCCTCTCGAATC	MUT frg1
APP_1mut_Rv	68	CTTTACAGTACACAAAACCTCTATTGATAATGTCGTGGAAAGAGGAAATGTTAAGAG	MUT frg1
APP_2mut_Fw	66	CCACGACATTAATCAATAGGAGTTTTTGTGTACTGTAAGAGTTAGCTGTCTTAACTACTTGC	MUT frg2
APP_Rv	66	CATGTCTGGATCTACGTAATTTTCAACAGCTGGGCAC	MUT frg2
TUBB3_Fw	67	GTACAAGTAATCTAGAAGGAACCCACTGCAAAGCCAGAG	MUT frg1
TUBB3_1mut_Rv	67	GCCTCACTCCTACATGTTGAACAGCAGGAAGTTTATTTTAAAAATAAATAATCCAG	MUT frg1
TUBB3_2mut_Fw	63	TAACTTCTGCTGTTCAACATGTAGGAGTGGGCTTTTTCTAATTATGGAACAGGC	MUT frg2
TUBB3_2mut_Rv	63	GGATTATATTTATGTACGTGTCTATATCAACACAGACTCAAACCTCTATATATGC	MUT frg2
TUBB3_3mut_Fw	67	GAGTCTGTGTTGATATAGACACGTACATAAATAATCCTTTATCTATTACGCTATCAACTTTG	MUT frg3
TUBB3_Rv	67	GTATCTTATCATGTCTGGATCTACGTAATAAATACAGTACTCTGCATCTGAACCTGTGC	MUT frg3
THBS1_Fw	64	CGGCATGGACGAGCTGTACAAGTAATCTAGATCCAGAAGTTCTTATTCCATG	MUT frg1
THBS1_1mut_Rv	64	GCTACATCTACAGCCTACCCTCTTAGTACTCTGGAGATTCAGGTCCTCTC	MUT frg1
THBS1_2mut_Fw	63	GAATCTCCAGAGTACTAAGGAGTGGAGGCTGTAGATGTAGCTCCCGCTG	MUT frg2
THBS1_2mut_Rv	63	CACACACACACACACGTCGCCGTCTAATACTCTTTTAAAGGAGTAATATATAAACCAC	MUT frg2
THBS1_3mut_Fw	56	CTTTAAAGAGTATTAGACACGGCACGTGTGTGTGTGTGTTTGGCGTGGGGAGAGAGAG	MUT frg3
THBS1_Rv	56	GTATCTTATCATGTCTGGATCTACGTAATTTTAAATAGTTTATTTTTTATATTTTAC	MUT frg3
THBS1_Q5_Fw	60	ATTCATAGACACTAAGAGGATGTGATCGCAC	MUT Q5
THBS1_Q5_Rv	60	GAAGAACTTCTGGATCTAGATTACTGTACAGCTC	MUT Q5

LIST OF MORPHOLINOS (MOs)

Name	Vendor	Sequence (5'-3') all 3' Fluorescein	Used
MO-5p #1	Gene tools	AGATACCAAACCTACCGACAGCGTT	in MOs-5p and MO-181- family cocktail
MO-5p #2	Gene tools	CTTTCTAAAACCTACCGACAGCGTT	in MOs-5p and MO-181- family cocktail
MO-3p #1	Gene tools	GATCGATGGTTTGCCTTTAGATAC	in MOs-3p cocktail
MO-3p #2	Gene tools	GGCCGATGGTTTATATTTTATACT	in MOs-3p cocktail
Pri-miR-MO	Gene tools	ATTGCCGTAATGTACAGTCAACGAT	for blocking pre-miR-181a-1 Drosha cleavage
Standard control (co-MO)	Gene tools	CCTCTTACCTCAGTTACAATTTTATA	as control MO 25 nt
miR-181b-MO	Gene tools	CCACCCGACAGCAATGAATGTT	in MO-181- family cocktail
Custom control (co-MO)	Gene tools	GTGTAACACGTCTATACGCCCA	as control MO 22 nt