

dGoligo full name and target site within 5'UTR	Short -cut	Position 5'→3' [nt]	Target sequence (element)	Structure / strand orientation	Design method	dGoligo Sequence 5'→3'
dGoligo1-TRβ1vA-IRES-ex1c/ex2a-F	dG1	86→108	e1 TRβ1	sense	manual	GGAGGCAGCGGGATCTGCGATTT
dGoligo2-TRβ1vA-anti-IRES-ex1c/ex2a-R	dG2	108→86	e1 TRβ1	antisense	manual	AAATCGCAGATCCCGCTGCCTCC
dGoligo3-TRβ1vA-uAUGs-ex3/ex2a-F	dG3	159→179	e3 TRβ1	sense	manual	TGAATAAGAAGGAGATGTACAG
dGoligo4-TRβ1vA-anti-uAUGs-ex3/ex2a-R	dG4	179→159	e3 TRβ1	antisense	manual	CTGACATCTCTCTTATTCA
dGoligo5-TRβ1vA-mirSenseIres-ex1c/ex2a-F	dG5	86→108	e1 TRβ1	miRNA-like sense control	manual	GGAGGCAGCGGGtagATCTGCGATTT
dGoligo6-TRβ1vA-anti-mirAntiSenseIres-ex1c/ex2a-R	dG6	108→86	e1 TRβ1	miRNA-like antisense control	manual	AAATCGCAGATctaCCCGCTGCCTCC
dGoligo7-TRβ1vA-cisAE-ex2a-F	dG7	129→151	e2 TRβ1	sense	automated dGenhancer	CGTGGGTGCCAAGTCCACACAT
dGoligo8-TRβ1vA-anti-cisAE-ex2a-R	dG8	151→129	e2 TRβ1	antisense	automated	ATGTGTGGAActTGACCCACG
dGoligo9-TRβ1vA-mirSenseCisAE-ex2a-F	dG9	129→151	e2 TRβ1	miRNA-like sense	automated dGenhancer	CGTGGGTGCCAActaGTTCCACACAT
dGoligo10-TRβ1vA-mirAntisense-cisAE-ex2a-R	dG10	151→129	e2 TRβ1	miRNA-like antisense	automated	ATGTGTGGAActctTGACCCACG
dGoligoSc-TRβ1vA	dGsc	108→86	-	nonsense / scrambled control	automated GeneScript	GCCATCACTACGCTACCTCAGTCGA
dGoligo1p16-p16INK4a5'UTR-sense-U	dG1p16	280→301	e1 p16	sense	manual and automated dGenhancer	AGCAGGCAGCGGGCGGGGGGA
dGoligo2p16-p16INK4a5'UTR-antisense-L	dG2p16	301→280	e1 p16	antisense	manual and automated dGenhancer	TCCCCGCCGCCGCTGCCTGCT
dGoligo3p16-p16INK4a5'UTR-miRNA-U	dG3p16	280→301	e1 p16	miRNA-like sense	automated dGenhancer	AGCAGGCAGCGGtaGCGGGGGGA
dGoligo4p16-p16INK4a5'UTR-miRNA-L	dG4p16	301→280	e1 p16	miRNA-like antisense	automated dGenhancer	TCCCCGCCGtaCCGCTGCCTGCT
dGoligo5p16-p16INK4a5'UTR-sense-U	dG5p16	2→22	e2 p16	sense	automated dGenhancer	GAGGGCTGCTCCGGCTGGTG
dGoligo6p16-p16INK4a5'UTR-antisense-L	dG6p16	22→2	e2 p16	antisense	automated dGenhancer	CACCAGCCGAAGCAGCCCTC
dGoligoGscp16-p16INK4a5'UTR	dGscp16	301→280	-	nonsense / scrambled control	automated GeneScript	GTCCTCGCTCCGACCCGGTCTC
dGoligo-hsa-miR211	dG211	192→168	e3/e4 TRβ1	miRNA	miRBase	TTCCTTTGTCATCTTCGCT
dGoligo-hsa-miR-211-3p	dG211c	168→192	e3/e4 TRβ1	Complem. miRNA	miRBase	GCAGGGACAGCAAAGGGGTGC

Table S3. List of dGoligos (dGs) used in the study.

Position in 5'UTR indicates dG recognition site in 5'UTR variant A of TRβ1 (TRβ1vA, GeneBank acc. no.: AY286465.1) encoded by *THRB* gene and in p16INK4a 5'UTR (NM_000077.4) encoded by *CDKN2A*. 2-3-nucleotide, microRNA-mimicking loop is indicated with lowercase letters, dGsc-scrambled control.

dGenhancer - see Appendix S1

GeneScript - <https://www.genscript.com/ssl-bin/app/scramble>

miRBase - <http://www.mirbase.org/>