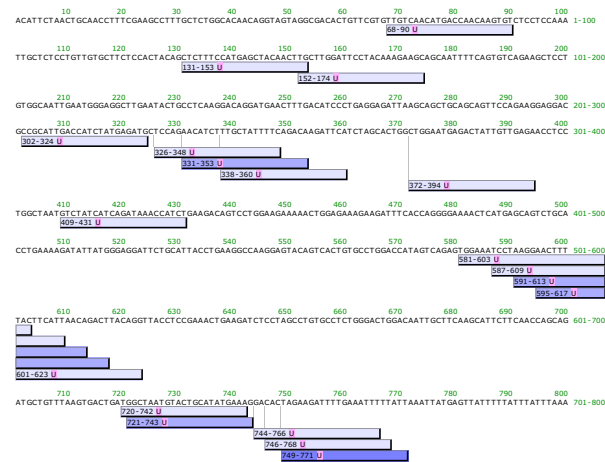


A

Effective siRNA candidates

target position	target sequence 21nt target + 2nt overlap	RNA oligo sequences 21nt guide (5'→3') 21nt passenger (5'→3')	functional siRNA selection: U-Tie	seed-duplex stability (Tm)	guide (passenger)	specificity check: minimum number of mismatches against any off-targets:	guide (passenger)
68-90	TTGTCACACGACCAACAAGTC	ACUUCUUGUGGCUCAUURUACAA GCUUUCUUCAGCCACCAACAAGUU	U	16.7 °C	20.5 °C	2	[2] (detail)
131-153	CTCTTCCTGATGACACACCTG	AGUUCUUGUAGUCUGGAAGAAAG CUUUCUUCAGGACCAACAACUUG	U	19.0 °C	20.1 °C	3	[2] (detail)
152-174	TCCTTGATTCCTCAACAAGAG	UUCUUCUUGUGUAGUACAGAC CUUGGACUUCUUCACAAAGAAGC	U	19.2 °C	20.1 °C	3	[2] (detail)
302-324	CCGATCGACATCATGAGATG	UUCUUCUUCUUCUUCGCAAGCGG CUGUUCGUCUCUUCUUCUUCAGG	U	17.8 °C	20.5 °C	4	[3] (detail)
326-348	TCGACACACTTTCGATTCTTC	AUAUACGAAAGAUUUCUUGGA CAGACAAUUCUUGCUUUUUUCU	U	19.7 °C	20.2 °C	2	[2] (detail)
331-353	AACATCTGCTTACTTTCAGACA	UCGUAAGAUKGUCAGAGAGUCU CAUUCUUCUUAUUUCUACAGCA	U	12.2 °C	12.0 °C	2	[2] (detail)
338-360	TGCTATTTTCAGACAAGATTA	AUUUCUUCUUCGAAAUAJAGCA GCUUAUUCUUCGACACAGAGUCA	U	19.2 °C	-4.3 °C	3	[2] (detail)
372-394	TCGGAATGAGCATTTGTTGAGA	UCACAAUUGUCUUCUUCUCCGAC CGGAAGGUGACUUCUUCUUCAGG	U	12.1 °C	20.4 °C	2	[2] (detail)
409-431	GTCATCTCAGATAAACATCT	AGUUGUUAUUUCUUCAGUACGAC CUUAUCUACAGAAUAAACCAUCU	U	10.0 °C	17.4 °C	3	[3] (detail)
581-603	TGGAAATCTAAGGAACATTTAC	AAMAUUUCUUCAGGUAUUCUCA GAUUUCUUAAGGAAGCUUUUAC	U	13.3 °C	18.7 °C	2	[2] (detail)
587-609	TCTAAGGAACATTTTACTTCAT	UCUUCUUCUUCUUCUUCUUCUUC UUCUUCUUCUUCUUCUUCUUCU	U	14.6 °C	19.9 °C	2	[2] (detail)
593-615	AAGTGAACCTTACTTCATACACA	UUUAUUAAGGAAAAGUUUCUUCU GGACUUCUUCUUCUUCUUCUUCU	U	8.9 °C	13.3 °C	2	[2] (detail)
595-617	AACTTACTTACTTCAACAGACT	UCUUCUUCUUCUUCUUCUUCUUC UUUUCUUCUUCUUCUUCUUCUUC	U	11.8 °C	4.9 °C	2	[2] (detail)
601-623	TACTTACTTACTTCAACAGACT	UCUUCUUCUUCUUCUUCUUCUUC CUCUUCUUCUUCUUCUUCUUCU	U	21.4 °C	8.9 °C	3	[3] (detail)
720-742	TGGCATGATCTGCATATGAAA	UCUUAUAGCGUACUUAUUCAGG UCUUAUAGCGUACUUAUUCAGG	U	21.1 °C	11.6 °C	3	[2] (detail)
721-743	GGCATTACTGCTGATATGAAAG	UCUUAUAGCGUACUUAUUCAGG CUCUUCUUCUUCUUCUUCUUCU	U	14.9 °C	8.5 °C	3	[2] (detail)
744-766	GACACTAAGAGATTTTGAATTT	UCUUCUUCUUCUUCUUCUUCUUC CUCUUCUUCUUCUUCUUCUUCU	U	7.7 °C	18.9 °C	2	[2] (detail)
746-768	TACAAGAAATTTTGAATTTTT	AUAUUCUUCUUCUUCUUCUUCG CUGAGUUCUUCUUCUUCUUCUUC	U	7.4 °C	20.2 °C	2	[2] (detail)
749-771	GAGGAAATTTTGAATTTTTAT	UUAAAUUUCUUCUUCUUCUUCU GAGUUAUUUGAAUUUUUUUUU	U	12.0 °C	5.3 °C	2	[2] (detail)

Graphical view of effective siRNA candidates

**B**

Similar Sequences

19	GCTTGGATTCTCAAAAAGA	[exon(2)] M28022 Hs#51166 Human interferon beta 1 (IFN-beta-1) mRNA, complete cds. NM_002376.2 Homo sapiens interferon, beta 1, fibroblast (IFNB1), mRNA
17	GCTTGGATTCTCAAAAAGA	[unassigned-motif(1)] BX648613 Hs#516818038 Homo sapiens mRNA; cDNA DKFZp686N06224 (from clone DKFZp686N06224)
16	GCTTGGATTCTCAAAAAGA	[exon(2)] BX52104 Hs#52104 Human endothelial leukocyte adhesion molecule 1 (ELAM1) mRNA, complete cds. NM_000450.1 Homo sapiens selectin E (endothelial adhesion molecule 1) (SELE), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(2)] BX648671 Hs#516817980 Homo sapiens mRNA; cDNA DKFZp686B0247 (from clone DKFZp686B0247) NM_182532.1 Homo sapiens hypothetical protein MGC61571 (MGC61571), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] AY001114 Hs#53438475 Homo sapiens unknown mRNA sequence
16	GCTTGGATTCTCAAAAAGA	[exon(1)] NM_00101786.1 Homo sapiens BRCC2 protein (BRCC2), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] NM_024638.2 Homo sapiens queuine tRNA-ribosyltransferase domain containing 1 (QTRTD1), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(7)] NM_023606 Hs#54621785 Homo sapiens mRNA; cDNA DKFZp686L2267 (from clone DKFZp686L2267) NM_003872.2 Homo sapiens neuropilin 2 (NRP2), transcript variant 2, mRNA NM_018534.3 Homo sapiens neuropilin 2 (NRP2), transcript variant 4, mRNA NM_020267.1 Homo sapiens neuropilin 2 (NRP2), transcript variant 6, mRNA NM_021266.1 Homo sapiens neuropilin 2 (NRP2), transcript variant 1, mRNA NM_021267.1 Homo sapiens neuropilin 2 (NRP2), transcript variant 5, mRNA NM_021279.1 Homo sapiens neuropilin 2 (NRP2), transcript variant 3, mRNA
16	GCTTGGATTCTCAAAAAGA	[exon-exon junction(1)] XM_035572.9 PREDICTED: Homo sapiens chromosome 4 open reading frame 9 (C4orf9), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] BF9520.1 Hs#53158510-CT2-MT0158-30100-572-e12 MT0158 Homo sapiens cDNA, mRNA sequence
16	GCTTGGATTCTCAAAAAGA	[exon(1)] NM_373814.2 PREDICTED: Homo sapiens hypothetical LOC388572 (LOC388572), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] AK125099 Hs#516887605 Homo sapiens cDNA FL341309 fs, clone CTONG020556, moderately similar to Homo sapiens general transcription factor 1, 1 (GTF2P)
16	GCTTGGATTCTCAAAAAGA	[exon(2)] AL135733 Hs#5121524 DKFZp34H0831.4_r34 (synonym: htss3) Homo sapiens cDNA clone DKFZp43H0831.5, mRNA sequence
16	GCTTGGATTCTCAAAAAGA	[exon(2)] ABD94093 Hs#515632608 Homo sapiens DLN41 mRNA, complete cds NM_198489 Homo sapiens similar to DLN41 (DLN41), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(2)] AF091263 Hs#51368572 Homo sapiens RNA binding motif protein 5 (RBMS) mRNA, complete cds NM_005778.1 Homo sapiens RNA binding motif protein 5 (RBMS), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(2)] BC023552 Hs#55517855 Homo sapiens stratfin, mRNA (cDNA clone MGC:19713 IMAGE:353428); complete cds NM_006142.3 Homo sapiens stratfin (SFN), mRNA
16	GCTTGGATTCTCAAAAAGA	[unassigned-motif(1)] BM65772 Hs#54081636 Uf-EK1-afn-h-18-0-Uf.1 Uf-EK1 Homo sapiens cDNA clone Uf-EK1-afn-h-18-0-Uf 3', mRNA sequence
16	GCTTGGATTCTCAAAAAGA	[exon(1)] CR749825 Hs#521591852 Homo sapiens mRNA; cDNA DKFZp686E19106 (from clone DKFZp686E19106)
16	GCTTGGATTCTCAAAAAGA	[exon(1)] NM_003803.2 Homo sapiens myomesin 1 (skelmin) 185kDa (MYO1), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] NM_002196.2 Homo sapiens insulinoma-associated 1 (INSM1), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(2)] BX647741 Hs#516819013 Homo sapiens mRNA; cDNA DKFZp686C0786 (from clone DKFZp686C0786) NM_198383.1 Homo sapiens EGF-like-domain, multiple 11 (EGFL1), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] BC073722 Hs#53603344 Homo sapiens tripartite motif-containing 52, mRNA (cDNA clone MGC:16175 IMAGE:3636274), complete cds NM_022765.2 Homo sapiens tripartite motif-containing 52 (TRIM52), mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(1)] BC039511 Hs#56158647 Homo sapiens, cDNA image:5579211, mRNA
16	GCTTGGATTCTCAAAAAGA	[exon(2)] AK023166 Hs#52651220 Homo sapiens cDNA FL313104 fs, clone NT28P3003243 NM_012461.1 Homo sapiens TERF1 (TRF1)-interacting nuclear factor 2 (TINF2), mRNA