

Supplementary Table 1. Primer details of *Ace1* gene and *GBSS* intron used for PCR amplification

<i>Ace1</i> sense primers	Forward	5'ATTCCCAAGCTTTCTAGAGACTGGTTGAATCCCGAAGA3' (<i>Hind</i> III & <i>Xba</i> I sites included)
	Reverse	5'GTTTGCCTCGACCTGCAGGAGGCTCTTAGACCACATAATGAAC3' (<i>Sal</i> I & <i>Pst</i> I sites included)
<i>Ace1</i> antisense primers	Forward	5'AAACCGGAATTCGAGCTCGACTGGTTGAATCCCGAAGA3' (<i>Eco</i> RI & <i>Sac</i> I sites included)
	Reverse	5'AAACGCGGATCCGAGGCTCTTAGACCACATAATGAA3' (<i>Bam</i> HI site included)
<i>GBSS</i> intron primers	Forward	5'GAAAATCTGCAGAACTCTCCTGGAAGGTAGGTG-3' (<i>Pst</i> I site included)
	Reverse	5'-AAACGCGGATCCAGGTTCTGCATGAACACCAG-3' (<i>Bam</i> HI site included)

Supplementary Table 2. Sequence of *Ace1* sense strand *nptII* Primers

<i>Ace1</i> sense primers	Forward	5'ATTCCCAAGCTTTCTAGAGACTGGTTGAATCCCGAAGA 3'
	Reverse	5'GTTTGCCTCGACCTGCAGGAGGCTCTTAGACCACATAATGAAC 3'
<i>nptII</i> primers	Forward	5' ATGATTGAACAAGATGGATTGCACGCAGGT 3'
	Reverse	5' TCAGAAGAACTCGTCAAGAAGGCGATAGAA 3'

Supplementary Table 3. *In silico* predicted potential siRNAs generated from the *Ace1* cDNA target region

Sl. No.	Position*	Sequence		GC%	Thermodynamic values
1.	55-73	siRNA-S	5' GUGGGUGAUUACCACUUUAUU 3'	42	-6.2 (-12.1, -5.9)
		cDNA	5' gtgggtgattaccacttta 3'		
		siRNA-AS	3' UUCACCCACUAAUGGUGAAAU 5'		
2.	596-614	siRNA-S	5' CGUGGUUCAAGUACAUAUUU 3'	42	-3.8 (-10.6, -6.8)
		cDNA	5' cgtggttcaagtacatcat 3'		
		siRNA-AS	3' UUGCACCAAGUUCAUGUAGUA 5'		
3.	19-37	siRNA-S	5' GACCCUAUAAAGAAUCGAAUU 3'	37	-3.7 (-12.3, -8.6)
		cDNA	5' gacctataaagaatcgaa 3'		
		siRNA-AS	3' UUCUGGGAUAAUUUCUUAGCUU 5'		
4.	196-214	siRNA-S	5' GACGAAAUCAAUUACGUUUU 3'	32	-3.4 (-10.5, -7.1)
		cDNA	5' gacgaatcaattacgtat 3'		
		siRNA-AS	3' UUCUGCUUUAGUUAUGCAUA 5'		
5.	305-323	siRNA-S	5' GAAGCGGAAACCAUCUAUUU 3'	47	-3.0 (-10.0, -7.0)
		cDNA	5' gaagcggaacccatctat 3'		
		siRNA-AS	3' UUCUUCGCCUUUGGUAGAU 5'		
6.	593-611	siRNA-S	5' CGACGUGGUUCAAGUACAUUU 3'	47	-3.0 (-9.9, -6.9)
		cDNA	5' cgacgtggttcaagtacat 3'		
		siRNA-AS	3' UUGCUGCACCAAGUUCAUGUA 5'		
7.	334-352	siRNA-S	5' GGAGACUCAACGAAGAUCUU 3'	47	-2.7 (-11.2, -8.5)
		cDNA	5' ggagactcaacgaagatca 3'		
		siRNA-	3' UUCCUCUGAGUUGCUUCUAGU 5'		

		AS			
8.	606-624	siRNA-S	5' GUACAUCAUAUGAGUUCAUUU 3'	32	-2.5 (-9.1, -6.6)
		cDNA	5' gtacatcatatgagttcat 3'		
		siRNA-AS	3' UUCAUGUAGUAUACUCAAGUA 5'		
9.	500-518	siRNA-S	5' CUCCGAAGAAUUGCACGAAUU3'	47	-2.1 (-10.6, -8.5)
		cDNA	5' ctccgaagaattgcacga3'		
		siRNA-AS	3'UUGAGGCUUCUUAACGUGCUU5'		
10	15-33	siRNA-S	5' CGAAGACCCUAUAAAGAAUUU 3'	37	-1.7 (-8.3, -6.6)
		cDNA	5' cgaagaccctataaagaat 3'		
		siRNA-AS	3' UUGCUUCUGGGAUAAUUCUUA 5'		
11	9-27	siRNA-S	5' GAAUCCCGAAGACCCUAUAUU3'	47	-1.5 (-7.9, -6.4)
		cDNA	5'gaatcccgaagaccctata3'		
		siRNA-AS	3' UUCUUAGGGCUUCUGGGAUAU5'		
12	225-243	siRNA-S	5' CUUGAACCCAGGGAAGAAUUU3'	47	-1.5 (-8.1, -6.6)
		cDNA	5'cttgaaccaggaagaat3'		
		SiRNA-AS	3' UUGAACUUGGGUCCCUUCUUA5'		
13	96-114	siRNA-S	5' GCAUCGUUAUGCAGAGACUUU3'	47	-1.4 (-10.2, -8.8)
		cDNA	5' gcatcgttatgcagagact3'		
		SiRNA-AS	3' UUCGUAGCAAUACGUCUCUGA5'		
14	502-520	siRNA-S	5' CCGAAGAAUUGCACGAACAUAU3'	47	-1.3 (-9.5, -8.2)
		cDNA	5' ccgaagaattgcacgaaca3'		
		SiRNA-AS	3' UUGGCUUCUUAACGUGCUUGU5'		

15	315-333	siRNA-S	5' CCCAUCUAUAAACCCGAGUUU3'	47	-1.2 (-10.3, -9.1)
		cDNA	5' cccatctataaacccgagt 3'		
		SiRNA-AS	3' UUGGGUAGAUUUUUGGGCUCAS'		
16	194-212	siRNA-S	5' CUGACGAAAUCAAUUACGUUU 3'	37	-1.1 (-9.4, -8.3)
		cDNA	5' ctgacgaaatcaattacgt 3'		
		SiRNA-AS	3' UUGACUGCUUUAGUUAUGCA5'		
17	84-102	siRNA-S	5' GAACGAAUUUGCGCAUCGUUU3'	47	-0.9 (-9.1, -8.2)
		cDNA	5' gaacgaattgcgcatcgt3'		
		siRNA-AS	3' UUCUUGCUUAAACGCGUAGCA5'		
18	496-514	siRNA-S	5' GAACCUCCGAAGAAUUGCAUU 3'	47	-0.8 (-10.0, -9.2)
		cDNA	5' gaacctccgaagaattgca 3'		
		SiRNA-AS	3' UUCUUGGAGGCUUCUUAACGU5'		
19	269-287	siRNA-S	5' GUAAGCGACUAAUGAGAUAAU 3'	37	-0.3 (-7.8, -7.5)
		cDNA	5' gtaagcgactaatgagata 3'		
		SiRNA-AS	3' UUCAUUCGCUGAUUACUCUAU5'		
20	617-635	siRNA-S	5' GAGUUCAUUAUGUGGUCUAUU 3'	37	-0.2 (-8.8, -8.6)
		cDNA	5' gagttcattatgtgtcta 3'		
		SiRNA-AS	3' UUCUCAAGUAAUACACCAGAU 5'		
21	261-279	siRNA-S	5' GGAAUUUAGUAAGCGACUAUU 3'	37	-0.2 (-8.8, -8.6)
		cDNA	5' ggaatttagtaagcgacta 3'		
		SiRNA-AS	3' UUCCUUAUUAUCAUUCGCUGAU 5'		
22	454-476	siRNA-S	5' CAGAAGUACUUGCCACAGUUU 3'	47	0.7 (-8.1, -8.8)
		cDNA	5' cagaagtacttgccacagt 3'		

		SiRNA-AS	3' UUGUCUUCAUGAACGGUGUCA 5'		
23	262-280	siRNA-S	5' GAAUUUAGUAAGCGACUAAUU 3'	32	0.7
		cDNA	5' gaatttagtaagcgactaa 3'		(-6.5, -7.2)
		SiRNA-AS	3' UUCUUAAAUCAUUCGCUGAUU 5'		
24	30-48	siRNA-S	5' GAAUCGAAAUGCUCUGGAUUU 3'	42	1.0
		cDNA	5' gaatcgaaatgctctggat 3'		(-7.9, -8.9)
		SiRNA-AS	3' UUCUUAGCUUUACGAGACCUA 5'		
25	101-119	siRNA-S	5 GUUAUGCAGAGACUGGAAAUU 3'	42	1.3
		cDNA	5' gttatgcagagactggaaa 3'		(-6.8, -8.1)
		SiRNA-AS	3' UUCAAUACGUCUCUGACCUUU 5'		
26	67-85	siRNA-S	5' CACUUUACGUGUGGAGUGAUU3'	47	1.4
		cDNA	5' cactttacgtgtggagtga 3'		(-8.0, -9.4)
		SiRNA-AS	3' UUGUGAAAUGCACACCUCACU 5'		
27	80-98	siRNA-S	5' GAGUGAACGAAUUUGCGCAUU 3'	47	1.9
		cDNA	5' gagtgaacgaatttgcgca 3'		(-10.0, -11.9)
		SiRNA-AS	3' UUCUCACUUGCUUAAACGCGU 5'		
28	236-254	siRNA-S	5' GGAAGAAUUAUUCUCCCGAUU 3'	42	2.0
		cDNA	5' ggaagaattattctccga 3'		(-9.8, -11.8)
		SiRNA-AS	3' UUCCUUCUUAUAAGAGGGCU 5'		
29	204-222	siRNA-S	5'CAAUUACGUAUUCGGAGAAUU3'	37	2.6
		cDNA	5' caattacgtattcggagaa 3'		(-5.7, -8.3)
		SiRNA-AS	3' UUGUUA AUGCAUAAGCCUCUU 5'		
30.	240-258	siRNA-S	5' GAAUUAUUCUCCCGAGGAAUU 3'	42	2.7

		cDNA	5' gaattattctcccaggaa3'		(-6.5, -9.2)
		SiRNA-AS	3' UUCUAAUAAGAGGGCUCCUU 5'		
31	277-295	siRNA-S	5' CUA AUGAGAU AUUGGGCGAUU 3'	42	6.0 (-6.0, -12.0)
		cDNA	5' ctaatgagatattgggcga 3'		
		SiRNA-AS	3' UUGAUUACUCUAUAACCCGCU 5'		