

Table S1. Sequences of the DNA templates used in this study*

DNA	sequences (5'-3')
512A	TAATACGACTCACTATAGGGAGAATGTCGAATGGGTATTCCACAGAC GAGAATTTCCGCTATCTCATCTCGTGCTTCAGGGCCAGGGTGAAAATG TACATCCAGGTGGAGCCTGTGCTGGACTACCTGACCTTTCTGCCTGCA GAGGTGAAGGAGCAGATTCAGAGGACAGTCGCCACCTCCGGGAACAT GCAGGCAGTTGAACTGCTGCTGAGCACCTTGGAGAAGGGAGTCTGGC ACCTTGTTGGACTCGGGAATTCGTGGAGGCCCTCCGGAGAACCGGC AGCCCTCTGGCCGCCGCTACATGAACCCTGAGCTCACGGACTTGCCC TCTCCATCGTTTGAGAACGCTCATGATGAATATCTCCAACCTGCTGAAC CTCCTTCAGCCCCTCTGGTGGACAAGCTTCTAGTTAGAGACGTCTTG GATAAGTGCATGGAGGAGGAAGTGTGACAATTGAAGACAGAAACCG GATTGCTGCTGCAGAAAACAATGGAAATGAATCAGGTGTAAGAGAGC TTCTCCC
512B	TAATACGACTCACTATAGGGAGAAGCTCTTTACACCTGATTCATTTT CATTGTTTTCTGCAGCAGCAATCCGGTTTTCTGTCTTCAATTGTCAACAG TTCTCCTCCATGCACTTATCCAAGACGTCTCTAACTAGAAGCTTGTCC ACCAGAGTGGGCTGAAGGAGGTTTCAGCAGTTGGAGATATTCATCATG AGCGTTCTCAAACGATGGAGAGGGCAAGTCCGTGAGCTCAGGGTTCA TGTAGCGGGCGGCCAGAGGGCTGCCGGTTCTCCGGAGGGCCTCCACG AATTCCTGAGTCCAACCAAGGTGCCAGACTCCCTTCTCCAAGGTGCTC AGCAGCAGTTCAACTGCCTGCATGTTCCCGGAGGTGGCGACTGTCCTC TGAATCTGCTCCTTCACCTCTGCAGGCAGAAAGGTCAGGTAGTCCAGC ACAGGCTCCACCTGGATGTACATTTTACCCTGGCCCTGAAGCACGAG ATGAGATAGCGGAAATTCTCGTCTGTGGAATACCCATTTCGACATTCTC CC
512C	TAATACGACTCACTATAGGGAGAATGAACACGATTAACATCGCTAAG AACGACTTCTCTGACATCGAACTGGCTGCTATCCCGTTCAACACTCTG GCTGACCATTACGGTGAGCGTTTAGCTCGCGAACAGTTGGCCCTTGAG CATGAGTCTTACGAGATGGGTGAAGCACGCTTCCGCAAGATGTTTGAG CGTCAACTTAAAGCTGGTGAAGTTGCGGATAACGCTGCCGCCAAGCCT CTCATCACTACCCTACTCCCTAAGATGATTGCACGCATCAACGACTGG TTTGAGGAAGTGAAAGCTAAGCGCGGCAAGCGCCCGACAGCCTTCCA GTTCTGCAAGAAATCAAGCCGGAAGCCGTAGCGTACATCACCATTA AGACCACTCTGGCTTGCTAACCAGTGCTGACAATAACAACCGTTCAGG CTGTAGCAAGCGCAATCGGTTCGGGCCATTGAGGACGAGGCTCGCTTC GGTCGTATCCGTGACCTTGAAGCTAAGCACTTCAAGAAAAACGTTGA GGAACCTCTCCC
512D	TAATACGACTCACTATAGGGAGAGTTCCTCAACGTTTTTCTTGAAGTG CTTAGCTTCAAGGTCACGGATACGACCGAAGCGAGCCTCGTCCTCAAT GGCCCGACCGATTGCGCTTGCTACAGCCTGAACGGTTGTATTGTCAGC ACTGGTTAGGCAAGCCAGAGTGGTCTTAATGGTGATGTACGCTACGGC TTCCGGCTTGATTTCTTGCAGGAACTGGAAGGCTGTCGGGCGCTTGCC GCGCTTAGCTTTCACCTCCTCAAACCAGTCGTTGATGCGTGCAATCAT

	CTTAGGGAGTAGGGTAGTGATGAGAGGCTTGGCGGCAGCGTTATCCG CAACCTCACCAGCTTTAAGTTGACGCTCAAACATCTTGCGGAAGCGTG CTTCACCCATCTCGTAAGACTCATGCTCAAGGGCCAACTGTTGCGGAG CTAAACGCTCACCGTAATGGTCAGCCAGAGTGTTGAACGGGATAGCA GCCAGTTCGATGTCAGAGAAGTCGTTCTTAGCGATGTTAATCGTGTT ATTCTCCC
512B- 3end	GGGAGAATGTCGAATGGGTATTCCACAGACGAGAATTTCCGCTATCTC ATCTCGTGCTTCAGGGCCAGGGTGAAAATTCTCCCTATAGTGAGTCGT ATTA
T7promot er_top_str and	<u>TAATACGACTCACTATAGGG</u>
112A	<u>TAATACGACTCACTATAGGGGAGAAGTCCAGCACAGGCTCCACCTGG</u> ATGTACATTTTCACCCTGGCCCTGAAGCACGAGATGAGATAGCGGAA ATTCTCGTCTGTGGAATACCCATTCGACATTCTCCC
403A	<u>TAATACGACTCACTATAGGGAGACACGTGTCTCTAGCAAAACCAGGG</u> CCTGAGCATAAGAAGTGGGACCCTTCTAGGCAGGGTGCAGTGGCTCA CGCCTGTAATCCCAGCACTTTGGGAGGCCAGGCAGGCGGATCACCT GAGGTCAGGAGTTCAAGACCAGCCTGACCAACCTGGAGAAACCCCGT CTCTACTAAAAATACAAAAAATTAGCTGGGCGTGGTGGTAGGCACCT GTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCTCTTGAACC CGGGAAGTGGAGGTTGCGGACCTGAGATCATGCCATTGCACTCCAGC CTGGGCAAGAAGAGCGAAACTCCATCTTAAACAAACAAACAAAAAAA AAAGAACTGGGACCCTTCTGCCATCTGACATAGCCGAATTCCGG
386A	<u>TAATACGACTCACTATAGGGAGACAAAGCACATCTCTATCCTTTCTCC</u> CAGTTGCCCTCTCCTTTTTTGTGTTTTTTTTTGAGGTTGAGTTTTGCTC TTGTTGCCAGGCTGGAGTGCAATAGTGCAATCTTGGCTAACTGCAAC CTCCGCTCCCAGGTTCAAGCAATTCTCCTGCCTCAGTCTCCCGAGTA GCTGGGATTACAGTCATGCATCACCATGCCTGGCTAATTTTGTATTGT AGTAGAGATGGGGTTTCTCCATGTTGGTCAGGCTGGTCTCAAACACCT GACCTCAGGTGATCTGCCTGCCTTGGCCTTCCAAAGTGCTGGGATTAC AGGCATGAGCCACCGCGCCCGCCTGCCCTTTCCAAGAGATATGCTC AGCATAAGAATTCCGG

*The T7 promoters are underscored.

*Sequences described in Figure 3 are not included in this table.

Table S2. Sequences of DNA oligonucleotides for RACE.

oligos for :	oligo name	description	sequence (5'-3')
5' RACE	Oligo 1	RT primer for 512B RNA	GGGAGAATGTCTGAATGGGTATTC CACAGACGAGAAT
	Oligo 2	RT primer for c512B RNA	GGGAGAAGCTCTCTTACACCTGAT TCATTTCCATTGTTTTCTG
	Oligo d(T)-Anchor Primer	Primer for 2 nd cDNA synthesis	GACCACGCGTATCGATGTCGACTT TTTTTTTTTTTTTTTV (V=A, C or G)
	Oligo 3	PCR primers for 512B	GGGAGTCTGGCACCTTGG
	PCR Anchor Primer		GACCACGCGTATCGATGTCGAC
	Oligo 4	PCR primers for c512B	GGGAGAGACTGTCCTCTGAATCT GCTCCTTCACCTCT
	PCR Anchor Primer		GACCACGCGTATCGATGTCGAC
	Oligo 3	Sequencing primer for 512B	GGGAGTCTGGCACCTTGG
Oligo 4	Sequencing primer for c512B	GGGAGAGACTGTCCTCTGAATCT GCTCCTTCACCTCT	
3' RACE	Oligo d(T)-Anchor Primer	RT primer for poly A added RNA	GACCACGCGTATCGATGTCGACTT TTTTTTTTTTTTTTTV (V=A, C or G)
	Oligo 1	Primer for c512B 2 nd cDNA synthesis	GGGAGAATGTCTGAATGGGTATTC CACAGACGAGAAT
	Oligo 2	Primer for 512B 2 nd cDNA synthesis	GGGAGAAGCTCTCTTACACCTGAT TCATTTCCATTGTTTTCTG
	Oligo 3	PCR primers for c512B	GGGAGTCTGGCACCTTGG
	PCR Anchor Primer		GACCACGCGTATCGATGTCGAC
	Oligo 4	PCR primers for 512B	GGGAGAGACTGTCCTCTGAATCT GCTCCTTCACCTCT
	PCR Anchor Primer		GACCACGCGTATCGATGTCGAC
	Oligo 3	Sequencing primer for c512B	GGGAGTCTGGCACCTTGG
Oligo 4	Sequencing primer for 512B	GGGAGAGACTGTCCTCTGAATCT GCTCCTTCACCTCT	