

**Table S2: Oligo DNAs used in this study****Oligo DNAs for adenovirus vector construction**

shNT	
shNT-U	CACCGGGCGCGATAGCGCTAATAATTTCTCGAGAAATTATTAGCGCTATCGCGCTTT
shNT-D	GAAAAAAGCGCGATAGCGCTAATAATTTCTCGAGAAATTATTAGCGCTATCGCGCCC
<i>shNEAT1a</i>	
shNEAT1a-U	CACCGGGGAGTCGGTATTGTTGGTAATCTCGAGATTACCAACAATACCGACTCCTTT
shNEAT1a-D	GAAAAAAGGAGTCGGTATTGTTGGTAATCTCGAGATTACCAACAATACCGACTCCCC
<i>shNEAT1b</i>	
shNEAT1b-U	CACCGGATGGACCGTGGTTTGTACTACTCGAGTAGTAACAAACCACGGTCCATTTT
shNEAT1b-D	GAAAAAAATGGACCGTGGTTTGTACTACTCGAGTAGTAACAAACCACGGTCCATCC
<i>shSOD2a</i>	
shSOD2a_U	CACCGGGCACGCTTACTACCTTCAGTACTCGAGTACTGAAGGTAGTAAGCGTGCTTT
shSOD2a_D	GAAAAAAGCACGCTTACTACCTTCAGTACTCGAGTACTGAAGGTAGTAAGCGTGCCC
<i>shSOD2b</i>	
shSOD2b_U	CACCGGGTGGTGGTCATATCAATCATACTCGAGTATGATTGATATGACCACCACTTT
shSOD2b_D	GAAAAAAGTGGTGGTCATATCAATCATACTCGAGTATGATTGATATGACCACCACCC

**qPCR primers***Adenovirus titration*

AdE2B_Titer_For	TGTCAAGCTTGGTGGCAAAC
AdE2B_Titer_Rev	TCGCGACAAAAACCAAACCC

*mRNA determination*

ACTB_S	GATGCAGAAGGAGATCACTGC
ACTB_AS	TGATCCACATCTGCTGGAAG
total NEAT1_S	TGCCACAACGCAGATTGATG
total NEAT1_AS	ACAAGAAGGCAGGCAAACAG
NEAT1v2_S	AGGGTTCTGTTGCTAACACG
NEAT1v2_AS	TGCCGATGAAGCAACAAAGC
SOD2_S	ACATCAACGCGCAGATCATG
SOD2_AS	TGCAGGCTGAAGAGCTATCTG
BIP_S	AACCGCTGAGGCTTATTTGG
BIP_AS	TCTTTGGTTGCTTGCGGTTG
CHOP_S	GCGCATGAAGGAGAAAGAACAG
CHOP_AS	ATTTCCTGCTTGAGCCGTTT
ERO1 $\alpha$ _S	AAGGGACTGTGCTGTCAAAC
ERO1 $\alpha$ _AS	CTCCAAGTCGTTTCAGCTTGTTT