

Appendix A The primers of off-target genes

Gene Name	Primer (5'-3')
<i>dsHvcitron-F</i>	taatacgactcactatagggCCCCACAGGTTTGAATCTA
<i>dsHvcitron-R</i>	taatacgactcactatagggCCGTCTTCCGACTTGAGTTC
<i>dsHvhelicase-F</i>	taatacgactcactatagggAAGCACCTCAGAGCACACCT
<i>dsHvhelicase-R</i>	taatacgactcactatagggAGCAGTTCTGCCAACACGAT
<i>dsHvtransposase-F</i>	taatacgactcactatagggCCGGATAAATACGGCATCAA
<i>dsHvtransposase-R</i>	taatacgactcactatagggGTTGCCAACAGGAAGTGACC
<i>dsHvserine-F</i>	taatacgactcactatagggAAGGCGATGACGAAAGAAAA
<i>dsHvserine-R</i>	taatacgactcactatagggATCTCTGGTCGGATTCCACA
<i>dsHvdynein-F</i>	taatacgactcactatagggATCAAATTCCAGTTGTCCGC
<i>dsHvdynein-R</i>	taatacgactcactatagggCACAGCAGTTGACTACACCGA
<i>dsHvE3ubiquitin-F</i>	taatacgactcactatagggGTCAGAGAGGCAGTTTTGGC
<i>dsHvE3ubiquitin-R</i>	taatacgactcactatagggACTTTTGAAGCTTCGTCCCA
<i>Hvcitron-F</i>	GAGCGAGAGCTGAAAGAAG
<i>Hvcitron-R</i>	GTTCGAGTAGCGCCATATC
<i>Hvhelicase-F</i>	ACAAGCTGCCACAATACC
<i>Hvhelicase-R</i>	TCTTCACCTTCACGTCTCT
<i>Hvtransposase-F</i>	AGTCGGGTAAAGAGGTAGAT
<i>Hvtransposase-R</i>	TCAGCGTCGATCATGTATTT
<i>Hvserine-F</i>	ATGACAGAGGAGGAAGAGAC
<i>Hvserine-R</i>	AGCACAACCATACCCATTAC
<i>Hvdynein-F</i>	GCATCTTCAGTCCATCCTTC
<i>Hvdynein-R</i>	GGAATCGAAGGGCACAAATA
<i>HvE3ubiquitin-F</i>	CTCAACCAGGATGTGGAATG
<i>HvE3ubiquitin-R</i>	GGAACTACAAGCACCAATGT

Appendix B Primers for transcriptome up- and down-regulated genes

Gene ID	Primer sequence (5'-3')	NR_Description
up-regulated genes		
TRINITY_DN52635_c1_g1_i13	F: TCCAACCTGGAGGTAGTAGTG R: ACCCTGAGTATCCCACATAG	calcium-dependent secretion activator isoform X7
TRINITY_DN23644_c0_g2_i1	F: GCAGGGTCTACAGTTCATTT R: TTCGCAAGTCATGTTCTCC	transmembrane protease serine 9
TRINITY_DN62211_c1_g3_i2	F: TTTGGTGATCCAAGCAGAG R: CAGAGTCCTGCCACAATTT	G protein alpha i subunit
TRINITY_DN62574_c0_g1_i3	F: CAGCGGACCTTGTTATATGG R: CCGTATCGGACCACTTAGTA	rapamycin-insensitive companion of mTOR
TRINITY_DN57717_c1_g2_i1	F: GCTCTTCGTATCTGGGAAAT R: GTGTCGTCTTCTTCGTAAGG	digestive cysteine proteinase 1-like
TRINITY_DN61535_c1_g5_i6	F: AATGCAGACACTCCTATGAC R: ACTCTGATCTCTGCTCCTT	hypothetical protein B5V51_4020
TRINITY_DN60120_c2_g1_i4	F: GCTGAACGAACTGGTAGATG R: CCTTTCCTGCATCGTGTATC	unknown
TRINITY_DN48263_c0_g1_i1	F: GCACGATAGTACTAGCAGAAA R: CACGTATTGTTCTGAAACGC	protein valois isoform X1
TRINITY_DN51914_c0_g1_i1	F: GCCAATCCCTGCGTTATAG R: CATTGCTGCTGCCTCTATT	uncharacterized protein LOC107882348
TRINITY_DN60122_c0_g1_i10	F: GGGAGCTGGATGTACAATTA R: ACTGCCCTGCTAGAAATAAC	4-hydroxybenzoate polyprenyltransferase, mitochondrial
TRINITY_DN61618_c2_g1_i1	F: GTTGTTCACTGTGCCCAAT R: CCTCCAAATCTGGCCTAATG	unknown
TRINITY_DN53185_c1_g2_i6	F: GCATTCCTGTAGGCAGTTAG R: GTGTATTAGCCCGCACTATG	potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1
TRINITY_DN62949_c0_g1_i11	F: TCATTGTACTCTGCAACTCAA R: CATGCTGATGAATAAAGGATGC	hypothetical protein B7P43_G18342
TRINITY_DN58699_c2_g1_i2	F: CCTTGGAGGAACCAAAGAAT R: CTCCTGCAATCATGGTGTAT	UDP-sugar transporter UST74c-like Protein
TRINITY_DN59990_c2_g1_i1	F: AACTCCCAACAAGCAGAAG R: GGCGTCATTTGGGTCTATT	regulator of microtubule dynamics protein 2 isoform X1
TRINITY_DN59942_c0_g1_i4	F: CGAGAAGGTGACTGCTATTC R: AGGAGCTCTTCAGAAATTCG	enolase-phosphatase E1

TRINITY_DN60057_c0_g1_i1	F: GCGTTTGTGAAGAGGATAGA R: TGACACTGCACTCAAAGTTA	metaxin-1-like
TRINITY_DN57213_c0_g2_i1	F: CTGCCACTGCTTTGTCTTA R: CGATCACCGTTGTGTCTAC	zinc finger protein 625-like
TRINITY_DN59531_c0_g2_i1	F: GGTTTCAGCTTTCGGACTTA R: GCAATTCATCTGACCCATCT	sodium-coupled monocarboxylate transporter 1-like isoform X3
TRINITY_DN60544_c0_g4_i2	F: CGGATGTCAAAGCGGAAT R: ACCCACCGGACGTATATC	gag-pol polyprotein
TRINITY_DN60906_c10_g7_i5	F: CCTGAGTGCAAGTGCTAAA R: GCTGATTCGGTCCATCATA	Dual 3',5'-cyclic-AMP and -GMP phosphodiesterase 11-like Protein
TRINITY_DN49797_c0_g2_i1	F: TGCTGCTAGAGCCTTTCTA R: TCAGGTGCTAAGCCAATAAC	haloacid dehalogenase-like hydrolase domain-containing protein 2
TRINITY_DN38144_c0_g2_i1	F: CTACGAGCCACGAGAAGA R: ACACCACTTCCAGATCCA	hemK methyltransferase family member 2
TRINITY_DN54885_c1_g1_i6	F: CAAGCCCACAAGTTTCTCT R: CAGCCTCTTCCACACTTTC	organic cation transporter protein-like isoform X2
TRINITY_DN42783_c0_g1_i3	F: CAGAGGACTGGATGTTGATG R: AGACGTCCCAGTAGTATCAG	ATP-dependent RNA helicase p62-like Protein
TRINITY_DN58283_c3_g1_i9	F: GAGTATCGACCAGGCATTTC R: CTCCTGGCAACACAGTTAC	tyramine beta-hydroxylase
TRINITY_DN63296_c0_g1_i4	F: CGAGTGGTTCAGGTGTTTAG R: ACACCCATTGCGAGAAATAA	potassium voltage-gated channel protein Shab isoform X2
TRINITY_DN58991_c0_g1_i1	F: GTCAGAGCTGGAGAGAAATG R: TCGGTGGCCATTACAATAC	saccharopine dehydrogenase-like oxidoreductase

down-regulated genes

TRINITY_DN60710_c0_g3_i1	F: GCAGCCGACAAAGAAACTA R: GTCACAGAAGCAGCTCAA	hypothetical protein RR46_03798
TRINITY_DN59014_c2_g2_i3	F: ACAAGCTGCCACAATACC R: TCTTCACCTTACGTCTCT	probable ATP-dependent RNA helicase DDX55 homolog
TRINITY_DN58248_c0_g1_i4	F: GAGTTTCTGTCGGAGAATGG R: GTGTCGGGACTCATAAATC	thyrotroph embryonic factor isoform X4
TRINITY_DN63584_c3_g2_i5	F: AGAAGCTGGACCAAGTAATG R: ATTCCATCCGCATTCTATCC	DNA-directed RNA polymerase III subunit RPC5
TRINITY_DN63549_c3_g5_i4	F: GGGCTCAACTTGAAGAACA R: ACGAATGGTGCATGGAAA	unknown
TRINITY_DN62742_c0_g1_i4	F: GTACGAACTGTCGCACAAA R: TCAGCTCCTTGCGTATCT	serine/threonine-protein kinase N isoform X4
TRINITY_DN53380_c0_g1_i1	F: CACGGTGTAGGTGGATTTG R: TTGGCGAAGTTAGGTCTTTC	hexamerin-like

