

**Supplemental Table 1. List of primers used for qPCR and mutations**

Candidate Name	Stem-loop primer sequence for RT (5'-3')
sncRNA-U2 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>ACGAGG</b>
sncRNA-U3-1 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>TACGAT</b>
sncRNA-U3-2 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>GAGTCA</b>
sncRNA-U14 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>CGACGT</b>
sncRNA-U54 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>ACGATA</b>
sncRNA-U77 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>AGAAA</b>
miR-U86 SL	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>GACACC</b>
	<b>5' primer sequence for qPCR (5'-3')</b>
sncRNA-U2 5'qPCR	GCCGCCTGTCTCCGGCGTA
sncRNA-U3-1 5'qPCR	GCCGCCTAGTATCCTTAACGC
sncRNA-U3-2 5'qPCR	GCCGCCTTATAAATACTGA
sncRNA-U14 5'qPCR	GCCGCTAAGAGCTCTGTCTGA
sncRNA-U54 5'qPCR	GCCGCCTCTGCCTTAAATGA
sncRNA-U77 5'qPCR	GCCGCTGAATATGCTTGCTT
miR-U86 5'qPCR	GCCGCTAGAACTTTCTGAAT
	<b>TaqMan probe for qPCR (5'-3')</b>
sncRNA-U2 TaqMan	6FAM-TACGACACGAGGATA-mgbNFQ
sncRNA-U3-1 TaqMan	6FAM-TACGACTACGATCGC-mgbNFQ
sncRNA-U3-2 TaqMan	6FAM-TACGACGAGTCACTC-mgbNFQ
sncRNA-U14 TaqMan	6FAM-TACGACCGACGCTC-mgbNFQ
sncRNA-U54 TaqMan	6FAM-TACGACACGATATTC-mgbNFQ
sncRNA-U77 TaqMan	6FAM-TACGACAGAAAATA-mgbNFQ
miR-U86 TaqMan	6FAM-TACGACGACACCGAT-mgbNFQ
	<b>Stem-loop primer sequence for RT (5'-3')</b>
sncRNA-U2 SL (-3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>AGGATA</b>
sncRNA-U2 SL (+3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>CAGACG</b>
sncRNA-U3-1 SL (-3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>GATCGC</b>
sncRNA-U3-1 SL (+3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>GTCTAC</b>
sncRNA-U14 SL (-3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>CGTCTC</b>
sncRNA-U14 SL (+3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>ATGCGA</b>
sncRNA-U54 SL (-3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>ATATTC</b>
sncRNA-U54 SL (+3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>AACACG</b>
miR-U86 SL (-3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>ACCGAT</b>
miR-U86 SL (+3)	GTCTGATCCAGTGCAGGGTCCGAGGTATTCGCACTGGATACGAC <b>GACGAC</b>
	<b>Primers for galK insert (5'-3')</b>
sncRNA-U2-galK-F	CGAGAGAAGGAGAGAGAGAGAGAGACGGGAGGCAGAGCCGCGAGAGGGCAGCCTGTTGACAATTAATCATCGGCA
sncRNA-U2-galK-R	CACCCCTCTCTCGCGCGCGGGCCCTCTCGGGAACGACCGCGGCGCTTCAGCACTGTCTGCTCCTT
sncRNA-U3-1-galK-F	AAAAAATATAACGATAACGACAGCGTTACCGGCAGTCTCGCATAAACCGTCCCTGTTGACAATTAATCATCGGCA
sncRNA-U3-1-galK-R	ATAACGTCGGGAATGTGTGTCAGTTCAACGCTGCTTTTTCCCTAACAGTCTCAGCACTGTCTGCTCCTT
sncRNA-U14-galK-F	AACATATGATTACAATGATGAAAAGTCTTTTCGACACCGAAGAAGCCATGCTGTTGACAATTAATCATCGGCA
sncRNA-U14-galK-R	AGGCTATGAGAGGCATATATGAACTACCCAGCAGCATCGACAACAGCCCTCAGCACTGTCTGCTCCTT
sncRNA-U54-galK-F	AATCAAGTGGCTGATATACGATGGATGAACAACACCCAGAAGAGCCAACCTGTTGACAATTAATCATCGGCA
sncRNA-U54-galK-R	CAGTTTTAAAAATTTGGTTCGAGCGGAGTGTGTTGGAGATTAACCCATATTCAGCACTGTCTGCTCCTT
miR-U86-galK-F	CGATTCAGACCTCATATAAGAACCAACAGAAAAAATCAGAATCCACCAACCTGTTGACAATTAATCATCGGCA
miR-U86-galK-R	AACGGTCAGTGAATCTGGTGAATTTGACAGTGAATTTGACATCAGACATCAGCACTGTCTGCTCCTT
	<b>Reversion oligos (5'-3')</b>
sncRNA-U2 Rev	AGAGAGAGAGAGAGACGGGAGGCAGAGCCGCGAGAGGGCAGAACGCGCGGCTGTTCCCGAGGAGGGCCGCGCGCGCG
sncRNA-U3-1 Rev	ACGATAACGACAGCGTTACCGGCAGTCTCGCATAAACGTCGACTGTTAGGGAAAAAAGACAGCGTTGAAGTACACATTC
sncRNA-U14 Rev	CAACATATGATTACAATGATGAAAAGTCTTTTCGACACCGAAGAAGCCATGTGATGTAAGTACCGAATTAAGTGGGGC
sncRNA-U54 Rev	AAAATTCAGTGGCTGATATACGATGGATGAACAACACCCAGAAGAGCCAACGAGGTACAGCTTCAAAGCGGAAATATG
miR-U86 Rev	CCCGATTACAGCTCATATAAGAACCAACAGAAAAAATCAGAATCCACCAACGATACAGACAGCGAGTCGAGCATGTCT
	<b>Oligos for lentivirus insert (5'-3')</b>
sncRNA-U2 Lenti B	TTTGTCTCTCTCCGGCGTATCCTCGTGTGAAGCCACAGATGACGAGGATACGCGGAGGAGAGATTTTT
sncRNA-U3-1 Lenti B	CGAAAAATCTCTCCTCCGCGTATCCTCGTATCTGTGGCTTACACAGAGGATACGCGGAGGAGAGATA
sncRNA-U3-1 Lenti T	TTTGGTAGTATCTTAAACCGATCGTAGTGAAGCCACAGATGTACGATCGGTTAAGGATACTACTTTTT
sncRNA-U3-1 Lenti B	CGAAAAAGTAGTATCCTTAAACCGATCGTACATCTGTGGCTTCACTACGATCGGTTAAGGATACTACT
sncRNA-U14 Lenti T	TTTGATAAGGACTCTGTGAGACGTCGGTGAAGCCACAGATGCGACGTCGACAGAGCTCTTATTTTTT
sncRNA-U14 Lenti B	CGAAAAAATAAGAGCTCTGTGAGACGTCGATCTGTGGCTTCAACGACGTCGACAGAGCTCTTAT
sncRNA-U54 Lenti T	TTTGTCTGCTTAAATGAATATCGTGGTGAAGCCACAGATGACGATATTCATTAAGGCAGAGTTTTT
sncRNA-U54 Lenti B	CGAAAAACTCTGCCTTAAATGAATATCGTGCATCTGTGGCTTCAACAGATATTCATTTAAGGCAGAG
miR-U86 Lenti T	TTTGTAGAATTTCTGAATCGGTGTGCTGAAGCCACAGATGGACACCGATTGAGAAAGTTTCTTTTTT
miR-U86 Lenti B	CGAAAAATAGAATTTCTGAATCGGTGTGCATCTGTGGCTTCAACAGACCGATTGAGAAAGTTTCTA
	<b>Primers for qPCR to detect there kinetic transcripts (5'-3')</b>
U90 For	TCAGGTATCGAAGGATGTA
U90 Rev	CCCTCTGGAACAACATGGGAT
U100 For	CATAGTCTGTCCGCCATTGTTT
U100 Rev	CGCCAAACTACAAAGTGAAG
U12 For	CTGTCCAAACTTCTGCGCA
U12 Rev	CGGTAACCTGCCCTCTCCATG
	<b>TaqMan probe for qPCR (5'-3')</b>
U90 For	6FAM-AACGTATGCAAGACTACCGTC-mgbNFQ
U90 Rev	6FAM-TCAGTTCGATAGAGT-mgbNFQ
U100 For	6FAM-CTCGACACCCACGCT-mgbNFQ
	<b>Primers for qPCR</b>
MDM2 For	CCCCTCCATCACATTGCA
MDM2 Rev	AGTTTGGCTTTCTCAGAGATTTCC
eGFP For	ACCACTACCTGAGCACCAGTC
eGFP Rev	GTCCATGCCGAGAGTGATCC

Bold/italic regions are unique to each candidate

Underlined regions of oligos represent overhangs for BbsI (5') and BstBI (3') digestion