

**Supplemental Table 1. List of oligonucleotides**

Oligo name	sequence
B5 5p probe	ACCTCTGAGCCACAACCTTCCTT
B5 3p probe	AGAAAGGGAGGTTGCGGTCCGA
B2 3p probe	AAATGACTGAGTGACACGCA
B2 5p probe	TCTCTGCGCTACACTCAGTCATGT
B4 3p probe	AAAGGCGCAGAGACTGTGGTGCTA
B4 5p probe	TCCCAGCACCAGAGCCTCTC
T7 B5 G5p strand sense	GGATCCTTAATACGACTCACTATAGAGGAAGGTTGTGGCTCAGAGGT
T7 B5 G5p strand antisense	ACCTCTGAGCCACAACCTTCCTCTATAGTGAGTCGTATTAAGGATCC
T7 B5 5p strand sense	GGATCCTTAATACGACTCACTATAAAGGAAGGTTGTGGCTCAGAGGT
T7 B5 5p strand antisense	ACCTCTGAGCCACAACCTTCCTTTATAGTGAGTCGTATTAAGGATCC
T7 B5 G3p strand sense	GGATCCTTAATACGACTCACTATAGTCGAGCTATTTAACCTCTGAGCCACAACCTTCCTCTATAGTGAGTCGTATTAAGGATCC
T7 B5 G3p strand antisense	GAAAGGGAGGTTGCGGTCCGAGCTATAGTGAGTCGTATTAAGGATCC
T7 B2 pre-miRNA 5'G sense	GGATCCTTAATACGACTCACTATAGCATGACTGAGTGTAGCGCAGAGAGGTTGTCGTTCTGCGTGTCACTCAGTCATTTT
T7 B2 pre-miRNA 5'G antisense	AAAATGACTGAGTGACACGAGAGCCGACAACCTCTCTGCGCTACACTCAGTCATGCTATAGTGAGTCGTATTAAGGATCC
T7 B5 pre-miRNA 5'G sense	GGATCCTTAATACGACTCACTATAGAGGAAGGTTGTGGCTCAGAGGTTAAAATAGTCGGACCCGCAACCTCCCTTTC
T7 B5 pre-miRNA 5'G antisense	GAAAGGGAGGTTGCGGTCCGAGCTATTTAACCTCTGAGCCACAACCTTCCTCTATAGTGAGTCGTATTAAGGATCC
T7 B5 pre-miRNA sense	GGATCCTTAATACGACTCACTATAAAGGAAGGTTGTGGCTCAGAGGTTAAAATAGTCGGACCCGCAACCTCCCTTTC
T7 B5 pre-miRNA antisense	GAAAGGGAGGTTGCGGTCCGAGCTATTTAACCTCTGAGCCACAACCTTCCTTTATAGTGAGTCGTATTAAGGATCC
DUSP11 3x NT-Flag inner ext sen	TTATAAAGATCATGACATCGACTACAAGGATGACGATGACAAGGCCAGTGGCATCATCC
DUSP11 3x NT-Flag outer ext sen kpn1	GTGGGTACCGCCACCATGGACTACAAGACCATGACGGTGATTATAAAGATCATGACATC
DUSP11 491 sense	CTACCTCATTTGCGAGATATTTGATTG
DUSP11 506 antisense	CAATCAAAATATCTGCAAAATGAGGTAG
DUSP11 C152S sense	TATTTGGTGTCCACAGTACCCATGGT
DUSP11 C152S antisense	ACCATGGGTACTGTGGACCCAATA
B55p DSM s xho1	AGTCTCGAGACCTCTGAGCCACAACGTTGGTTATCGGCTAACCTCT
B55p DSM a xba1	CATTCTAGAAACCAACGTTGTGGCTCAGAGGTTAGCCGATAACCAA
B25p DSM s xho1	ATGCCTCGAGTCTCTGCGCTACACTCACTGTTGTATCGGCTATCTCTG
B25p DSM a xba1	GAGCTCTAGAACAACAGTGAGTGTAGCGCAGAGATAGCCGATACAACA
HSUR4 probe	AGAGTAACTCTCTGGCTGTGGCC
D11_gRNA_Block_1	ATCGATCGCTCGAGTGACAAAAAAGCAGGCTTTAAAGGAACCAATTTCAGTCGACTGGATCCGGTACCAAGGTCGGGCAGGAAGAGGGCCTAT TTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCTGTTAGAGAGATAAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGTAC AAAATACGTGACGTAGAAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTAATGTTTTAAAATGGACTATCATATGCTTACCGTAACTT GAAAGTATTTTCGATTTCTTGGCTTTATATATCTTGTGAAAGGACGAAACACCGTCTGAAAAGTCGCGTCTCGTTTTAGAGCTAGAAAATAGC AAGTTAAAATAAAGGCTAGTCCGTTATCAACTTGAAAAGTGGCACCGAGTCGGTGCTTTTTTTTCTAGACCCAGCTTTCTTGTACAAAAGTTGGC ATTA
D11_gRNA_Block_2	ATCGATCGCTCGAGTGACAAAAAAGCAGGCTTTAAAGGAACCAATTTCAGTCGACTGGATCCGGTACCAAGGTCGGGCAGGAAGAGGGCCTAT TTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCTGTTAGAGAGATAAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGTAC AAAATACGTGACGTAGAAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTAATGTTTTAAAATGGACTATCATATGCTTACCGTAACTT GAAAGTATTTTCGATTTCTTGGCTTTATATATCTTGTGAAAGGACGAAACACCGTCTGAAAAGTCGCGTCTCGTTTTAGAGCTAGAAAATAGC AAGTTAAAATAAAGGCTAGTCCGTTATCAACTTGAAAAGTGGCACCGAGTCGGTGCTTTTTTTTCTAGACCCAGCTTTCTTGTACAAAAGTTGGC ATTA
D11_FLK_gRNA	ATCGATCGCTCGAGTGACAAAAAAGCAGGCTTTAAAGGAACCAATTTCAGTCGACTGGATCCGGTACCAAGGTCGGGCAGGAAGAGGGCCTAT TTCCCATGATTCCTTCATATTTGCATATACGATACAAGGCTGTTAGAGAGATAAATTAGAATTAATTTGACTGTAAACACAAAGATATTAGTAC AAAATACGTGACGTAGAAAAGTAATAATTTCTTGGGTAGTTTGCAGTTTTAAAATTAATGTTTTAAAATGGACTATCATATGCTTACCGTAACTT GAAAGTATTTTCGATTTCTTGGCTTTATATATCTTGTGAAAGGACGAAACACCGTCTGAAAAGTCGCGTCTCGTTTTAGAGCTAGAAAATAGC AAGTTAAAATAAAGGCTAGTCCGTTATCAACTTGAAAAGTGGCACCGAGTCGGTGCTTTTTTTTCTAGACCCAGCTTTCTTGTACAAAAGTTGGC ATTA
CECR1_gBlock	gtacctcgagCTCCACCTCTGCTTCCCTCCTCCCAATGGTCCAGAATCCAGGGAAGTCACCTCTGTTTGTCCATCAGGCCGCTGTGACTCTGG CCTGACTCAGATGAGCCCTTAATTCATCTCCCTCTCTCTTTGCCCTCTCCAGCTCATTTTTCCCAAGAGCAGTGATGTTTTCAAGTTAAATTA AACCAGGGTACTCCACTGTGACAATTCAGAGCACTTAGAACTTGGCCCTCCACCAAGCTCCACCCGGGCTCCAGCATCTGTGACACAGGG GTCTCTCCCATGTCTATCCACACAGGCCCCCAAGCACACTGGCCTCTGGCCTTAGGCCCTCTGGCTCTCTCAGCTGGGAATGCTGTTTCT CTCCACTTTCATCTGCTGCCCTCTGTCACTCAGGTTTCCAGTCTTAGTCTCAGAAAGACTTGTCCCTTGGGGACCTTGTCTCGCTC CCTCCTGACTTCAACCCGATGATCTctagaagt
CECR1_DSM_gBlock	gtacctcgagCTCCACCTCTGCTTCCGAGCTCCCAATGGTCCAGAATCCAGGGAAGTCACCTCTGTTTGTCCATCAGGCCGCTGTGACTCTGG CCTGACTCAGATGAGCCCTTAATTCATCTCCCTCTCTCTTTGCCCTCTCCAGCTCATTTTTCCCAAGAGCAGTGATGTTTTCAAGTTAAATTA AACCAGGGTACTCCACTGTGACAATTCAGAGCACTTAGAACTTGGCCGAGCTCCACCAAGCTCCACCCGGGCTCCAGCATCTGTGACACAGGG GTCTCTCCCATGTCTATCCACACAGGCCCCCAAGCACACTGGCCTCTGGCCTTAGGCCGAGCTGGCTCTCTCAGCTGGGAATGCTGTTTCT CTCCACTTTCATCTGCTGCCCTCTGTCACTCAGGTTTCCAGTCTTAGTCTCAGAAAGACTTGTCCCTTGGGGACCTTGTCTCGCTC GGACCTGACTTCAACCCGATGATCTctagaagt
VA1-5p-RR sense	ATCGCTCGAGCAGACCAGGAAGAGTGCCTGCTATAGCGAGCAGACC
VA1-5p-RR antisense	GATCTCTAGAAGCGGGCACTTCCGTTGGTCTGCTCGCTATAGCGGG
VA1-5p probe	CAGACCAGGAAGAGTGCCTGCT
VA1-3p probe	AAAGGAGCACTCCCGGTTGTC
RI257 5p probe	CAACGCACATTTTCAGTC
RI257 3p probe	CTCAGGGCATGAAACAGGC
VAI sense	ATCGGGTACCCCGTGCAAAAGGAGAGCCTGTA
VAI antisense	ATCGTCTAGACTTTCCAGCCTAACCCGCTTACG
D11_FLK sense	ATGCCTCGAGGCATCTTGCCTCAGAGAATG
D11_FLK antisense	GTCACTCTAGAAGAAGGCCAGGATTCACCTTAG
vtRNA1-2 probe	GTAACCGCTGAGCTAAAGCCA
vtRNA1-3 probe	AGAGAGGTGGTTTGTGATGACAC
5sRNA probe	TCAGGGTGGTATGGCCGTAGAC