

Reporter gene constructs:

1. KRAS 3'-UTR into GFP-pcDNA3.1

5'AAGCTTATGGGCAGCAGCCATCATCATCATCACAGCAGCGGCCTGGTGCCGCGCGGCAGC
CGTACGATGAGCAAAGGAGAAGAAGCTTTTCACTGGAGTTGTCCCAATTCTTGTGAATTAGA
TGGTGATGTTAATGGGCACAAATTTTCTGTCCGTGGAGAGGGTGAAGGTGATGCTACAAAC
GGAAAACCTCACCTTAAATTTATTTGCACTACTGGAAAACCTACCTGTTCCATGGCCAACACTT
GTCACTACTCTGACCTATGGTGTTCATGCTTTTCCCGTTATCCCGATCACATGAAACGGCAT
GACTTTTTCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAACGCACTATATCTTTCAAAGA
TGACGGGACCTACAAGACGCGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATCGTA
TCGAGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTCGGACACAAACTCGAGTAC
AACTTTAACTCACACAATGTATACATCACGGCAGACAAAACAAAAGAATGGAATCAAAGCTAA
CTTCAAATTCGCCACAACGTTGAAGATGGTTCCGTTCAACTAGCAGACCATTATCAACAAA
ATACTCCAATTGGCGATGGCCCTGTCTTTTACCAGACAACCATTACCTGTGACACAATCTG
TCCTTTCGAAAGATCCCAACGAAAAGCGTGACCACATGGTCCCTTCTTGAGTTTGTAAGTCTG
GCTGGGATTACACATGGCATGGATGAGCTCTACAAA**GTTAAC**GGTGGCGGTGGCTCTGGAG
GTGGTGGGTCC**GGTACC**TAA**CGGACGCGTGGGCGGCAGCGCTGTGGCGGCGGCTGAGACGGC**
AGGGGAAGGCGGCGGCTCGGCCCGGAGTCCCGCTCCCGCGCCATTCGGACCCGGAGCGA
GCGCGGCGGGCCTGAAGGCGGCGGGAGCCTGAGGCGCGGCGGCTCCGCGGCGCGGAGA
GAGGCCTGCTGAAAATGACTGAGTATAAACTTGTGGTGGTTGGAGCTGGTGGCGTAGGCAAGAG
CGCCTTGACGATACAGCTAATTCAGAATCACTTTGTGGATGAGTACGACCCTACGATAGAGGACT
CCTACAGGAAACAAGTAGTAATTGATGGAGAAACCTGTCTCTGGATATTCTCGACACAGCAGG****
TCAAGAGGAGTACAGTGAATGAGGGACCACTACATGAGAAGTGGGGAGGGCTTTCTTTGTGTA
TTTGCCATAAATAACTAAATCATTGAAGATATTCACCATTATAGAGAACAATAAAAGAGT
AAAGGACTCTGAAGATGTGCCTATGGTCTGGTAGGGAATAAGTGTGATTTGCCTTCTAGAACAG
TAGACACGAAACAGGCTCAGGAGTTAGCAAGGAGTTACGGGATTCCGTTTATTGAGACCTCAGC
AAAGACAAGACAGGGTGTGACGATGCCTTCTATACATTAGTCCGAGAAATTCGAAAACATAAA
GAAAAGATGAGCAAAGATGGGAAGAAGAAGAAGAAGTCAAGGACAAGGTGTACAGTT****
ATGTGAATACTTTGACTCTTTCTTAAGGCACACTTAAGTAAAAGTGTGATTTTTGTACATTAC
TAAATTATTAGCATTGTGTTTAGCATTACCTAATCTTTTTTTTTCTTCTGTTTCGTGCAAACCTGTCAG
CTTTTATCTCAAATGCTTATTTTAAAAGAACAGTGGAAACCTTCTTTTTTCTAAGTGCCAGTATTC
CTGGGTTTTGGACTTAAACTAGCAATGCCTGTGGAAGAGACTAAAGACCTGAGACTCTGTCTTGG
GATTTGGTGCATGCAGTTGATTCCTTGTAGTTCTCTTACCAACTGTGAACACTGATGGGAAGCAG
GATAATGAAGCTCCGGACCATCCCTGCTCTGTGTCCATCTACTCATCCAATGGAGTCATTAGCA
GTCAATCGCAGCTTCACTGGACACTGAGGGTACAGACTTAGGCTCCCTTTGAGTCACGTCCAG
CGTGTCTAGACTTTATCATCTTTCAGAGGCGTAGGCAGACTGTTACAAAGGCTTTCTCTAGCTT
TCCACTGCAATTAATCTTGGTCACTCCCTCAAATAGTATATTTTTCTAGAAAAGGGGAAAAATG
GAAAAAAGGCAATGGAAAATGTTGAAATCCATTCAGTTTCCATGTTAGCTAAATTAC
TGTAAGATTCTATAATAGCTTTTCTGGTAAGGCAGACCCAGTATGAAATAGTAATAACCATTT
GGGCTATATTTACATGCTACTAAATTTTTGTAATAATTCAAACAACCTTAGCATATATAAAAAGTT
CTCATAAGAATTAAGTACAGGATCC**GACGGATCGGGAGATCTC**

HIS-tag GFP, Linker, 3'-UTR, Let-7 binding sites (corresponds to Kumar et al., 2007; miRTarBase, 2018)

2. CPEB 3'-UTR into GFP-pcDNA3.1

5'AAGCTTATGGGCAGCAGCCATCATCATCATCACAGCAGCGGCCTGGTGCCGCGCGGCAGC
CGTACGATGAGCAAAGGAGAAGAAGCTTTTCACTGGAGTTGTCCCAATTCTTGTGAATTAGA
TGGTGATGTTAATGGGCACAAATTTTCTGTCCGTGGAGAGGGTGAAGGTGATGCTACAAAC
GGAAAACACCCCTTAAATTTATTTGCACTACTGGAAAACACCTGTTCCATGGCCAACACTT
GCACTACTCTGACCTATGGTGTTCATGCTTTTCCCGTTATCCCGATCACATGAAACGGCAT
GACTTTTTCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAACGCACTATATCTTTCAAAGA
TGACGGGACCTACAAGACGCGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATCGTA
TCGAGTTAAAAGGTATTGATTTTAAAGAAGATGGAAAACATTCTCGGACACAAACTCGAGTAC
AACTTTAACTCACACAATGTATACATCACGGCAGACAAAACAAAAGAATGGAATCAAAGCTAA
CTTCAAATTCGCCACAACGTTGAAGATGGTTCGGTCAACTAGCAGACCATTATCAACAAA
ATACTCCAATTGGCGATGGCCCTGTCTTTTACCAGACAACCATTACCTGTGACACAATCTG
TCCTTTCGAAAGATCCCAACGAAAAGCGTGACCACATGGTCTTCTTGAGTTTGTAACTGCT
GCTGGGATTACACATGGCATGGATGAGCTCTACAAA**GTTAAC**GGTGGCGGTGGCTCTGGAG
GTGGTGGGTCC**GGTACC**TAAAGGAGCTGGCCTTGCCAGTGGCCTGTGGCGCCCAAAGCTGGC
AGGTCAGGCAAGCAGCCTGCACCACCCTGCCACTGGCGACCAGGGAGCTGGCTTCCCAAGGACA
AGGGAAAATTGTAGTCACCTTGCACCTGCTGAATCTGTCTTTGTTTCTGCACTAATTAATGCACA
TTGAGTTTTGTCAGGTTTTGTTTTAGGGGGTGTACCAAGGGCAAGGACCCTCTGGCTTACCCTCC
AAGCGACTCTGTAGTTTTCCAGATTTTAGTTCCCTCATTTTGCAGATGAAAAGCGGGGAAAAAAA
AAAAAAAAAAAAAAAAACTACGTGTCCAGAAGGTATTGAGGTATTGACACGGATGCCTACACCTA
GGTTATTTATT**AAAAGCGCTTTTTTACATTC**TGCAATACTGATGGTGTGATGCGCAGGTCTC
ATTGGTTTCATTCTTGCAGTTGCCATACAGTGCCTTTCATTTATTTAACCCCCACCTGAACGGCAT
AACTGAGTGTTCACTGGTGTTTTTTACTGTAAACAATAAGGAGACTTTGCTCTTCATTTAAACC
AAAATCATATTTATATTTACGCTCGAGGGTTTTT**ACCGGTTCTTTTTTACTCCT**TAAAACAGT
TTTTAAGTCGTTTGGAAACAAGATATTTTTCTTTCCTGGCAGCTTTTAAACATTATAGCAAATTTGTG
TCTGGGGGACTGCTGGTCACTGTTTCTCACAGTTGCAAATCAAGGCATTTGCAACCAAGAAAAAA
AAAATTTTTTGTATTTTAAACTGGACCGGATAAACGGTGTGTTGAGCGGCTGCTGTATATAGTT
TTAAATGGTTTATTGCACCTCCTTAAGTTGCACTTATGTGGGGGGTGGGGTTGATAGAAGTTTTT
AATCACAAGTACAGGACTTTTTTCTTTTGTAACTGAGCTAAAAGGGCTGTTTTTCGGTGGGG
GCAGATGAAGGCTCACAGGAGCCCTTCTCTTAGAGGGGGCAAGTACCCTTCCCTTATATCTTTA
ATTTGAGGAATGTATGAGATAACAGTTGCAGTTGACTGAAATGCCACTGGAATTTGAAAACCTTGA
CTTTTTTTCTTTCCTTTTTTTTTTTTTTTTTTTTTTAAAAAGAAACAAAAACCCACAAAAACTAC
TTGCCCTCCTAGGGAAGCTGTGTGCCAAAGAACCAGTGTGCATAACCCCTCCCTCCTGCTGAGCT
GACGTTGCATTGTTGCATATCCCAGCTACTCTGTGGGTTTTGTGAAGCTGTGTGTGAAGTCTCTAC
CTCATTGTAGTATATGCAGGCAAGACTGCACTCTCCTACAGATGTGTGGAGTAAGCTGTGGTGTGA
GTTTTTTTGGCACATAATAAACACGTTGCAGCAG**GGATCC**GACGGATCGGGAGATCTCCCGATCC
CCTATGGTCC

HIS-tag GFP, Linker, 3'-UTR, miR-122 binding sites (corresponds to Burns et al. 2011)

GGTACC – *KpnI*

GGATCC – *BamHI*