**Off-target analysis:**

Target Motif 1

5’-TGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGT-3’

>Query\_1:1-35\_alignment\_gnl|Hv-Morex3|chr3H:612458327-612458361

TGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGT

|||||||||||||||||||||||||||||||||||

TGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGT

>Query\_1:1-35\_alignment\_gnl|HvIgri|chr3H:617019814-617019848

TGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGT

|||||||||||||||||||||||||||||||||||

TGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGT

Target Motif 2

5’-ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC-3’

>Query\_1:1-35\_alignment\_gnl|Hv-Morex3|chr3H:612460127-612460161

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

|||||||||||||||||||||||||||||||||||

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

>Query\_1:1-35\_alignment\_gnl|HvIgri|chr3H:617021506-617021540

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

|||||||||||||||||||||||||||||||||||

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

>Query\_1:1-35\_alignment\_gnl|Hv-Morex3|chr1H:244446841-244446875

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

||||||||||||||||||| ||||||||||||||

ACCCCATTTGTGCCAATGGTCGTAAATGGACCATC

>Query\_1:1-35\_alignment\_gnl|HvIgri|chr1H:245488239-245488273

ACCCCATTTGTGCCAATGGCGGTAAATGGACCATC

||||||||||||||||||| ||||||||||||||

ACCCCATTTGTGCCAATGGTCGTAAATGGACCATC

Target Motif 3

5’-GGAGCAGTCGTCAGCGTGCGTAAGAACCAGGAAAG-3’

>Query\_1:1-35\_alignment\_gnl|Hv-Morex3|chr3H:612460340-612460374

GGAGCAGTCGTCAGCGTGCGTAAGAACCAGGAAAG

|||||||||||||||||||||||||||||||||||

GGAGCAGTCGTCAGCGTGCGTAAGAACCAGGAAAG

>Query\_1:1-35\_alignment\_gnl|HvIgri|chr3H:617021719-617021753

GGAGCAGTCGTCAGCGTGCGTAAGAACCAGGAAAG

|||||||||||||||||||||||||||||||||||

GGAGCAGTCGTCAGCGTGCGTAAGAACCAGGAAAG

Target Motif 4

5’-CAGGAGGATGCTAAGAGGTCCGACAAAGGCGCCAA-3’

>Query\_1:1-35\_alignment\_gnl|Hv-Morex3|chr3H:612462700-612462734

CAGGAGGATGCTAAGAGGTCCGACAAAGGCGCCAA

|||||||||||||||||||||||||||||||||||

CAGGAGGATGCTAAGAGGTCCGACAAAGGCGCCAA

>Query\_1:1-35\_alignment\_gnl|HvIgri|chr3H:617022876-617022910

CAGGAGGATGCTAAGAGGTCCGACAAAGGCGCCAA

|||||||||||||||||||||||||||| ||||||

CAGGAGGATGCTAAGAGGTCCGACAAAGCCGCCAA

*EIF4E*\_wild-type\_cds

 MAEDTETRPASAGAEEREEGEIA

ATGGCGGAGGACACGGAGACGAGGCCCGCGTCGGCGGGCGCGGAGGAGAGGGAGGAGGGGGAGATCGCG

 DDGDGSAAAAAGRVSAHPLENAW

GACGACGGAGACGGGTCCGCGGCGGCGGCGGCCGGGCGCGTCAGCGCCCACCCTCTGGAGAACGCCTGG

 Target motif 1

 TFWFDNPQGKSRAVAWGSTIHPI

ACCTTCTGGTTCGACAACCCGCAGGGCAAGTCCCGGGCGGTGGCCTGGGGGAGCACCATCCACCCCATC

 HTFSTVEDFWSLYNNIHHPSKLN

CACACCTTCTCCACCGTCGAGGACTTCTGGAGCCTTTACAACAATATTCATCACCCTAGCAAGTTGAAT

 Target mo-

 VGADFHCFKDKIEPKWEDPICAN

GTTGGAGCCGACTTCCATTGCTTCAAGGATAAGATTGAGCCAAAATGGGAAGACCCCATTTGTGCCAAT

tif 2

 GGKWTISCGKGKSDTFWLHTLLA

GGCGGTAAATGGACCATCAGTTGTGGCAAAGGGAAATCTGACACATTTTGGTTGCATACTTTGCTGGCA

 Target motif 3

 LIGEQFDFGDEICGAVVSVRKNQ

TTGATTGGTGAACAATTCGACTTTGGTGATGAAATTTGCGGAGCAGTCGTCAGCGTGCGTAAGAACCAG

 ERVAIWTKNAANETAQISIGKQW

GAAAGAGTAGCTATCTGGACTAAAAATGCTGCCAATGAAACTGCTCAGATAAGCATCGGTAAGCAGTGG

 Target motif 4

 KEFLDYKDSIGFVVHEDAKRSDK

AAGGAGTTTCTGGACTACAAGGACTCCATTGGATTCGTCGTTCATGAGGATGCTAAGAGGTCCGACAAA

 GAKNRYTV\*

GGCGCCAAGAACCGCTACACGGTTTGA

*eif4e*\_A169\_cds

 MAEDTETRPASAGAEEREEGEIA

ATGGCGGAGGACACGGAGACGAGGCCCGCGTCGGCGGGCGCGGAGGAGAGGGAGGAGGGGGAGATCGCG

 DDGDGSAAAAAGRVSAHPLENAW

GACGACGGAGACGGGTCCGCGGCGGCGGCGGCCGGGCGCGTCAGCGCCCACCCTCTGGAGAACGCCTGG

 TFWFDNPQGKIPGGGLGEHHPPH

ACCTTCTGGTTCGACAACCCGCAGGGCAAGATCCCGGGCGGTGGCCTGGGGGAGCACCATCCACCCCAT

 PHLLHRRGLLEPLQQYSSP\*QVE

CCACACCTTCTCCACCGTCGAGGACTTCTGGAGCCTTTACAACAATATTCATCACCCTAGCAAGTTGAA

 CWSRLPLLQG\*D\*AKMGRPHLCQ

TGTTGGAGCCGACTTCCATTGCTTCAAGGATAAGATTGAGCCAAAATGGGAAGACCCCATTTGTGCCAA

 WR\*MDHQLWQREI\*HILVAYFAG

TGGCGGTAAATGGACCATCAGTTGTGGCAAAGGGAAATCTGACACATTTTGGTTGCATACTTTGCTGGC

 IDW\*TIRLW\*\*NLRSSRQRA\*EP

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 RRQEPLHGL

AGGCGCCAAGAACCGCTACACGGTTTGA

*eif4e*\_T169\_cds

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 TFWFDNPQGKFPGGGLGEHHPPH

ACCTTCTGGTTCGACAACCCGCAGGGCAAGTTCCCGGGCGGTGGCCTGGGGGAGCACCATCCACCCCAT

 PHLLHRRGLLEPLQQYSSP\*QVE

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 CWSRLPLLQG\*D\*AKMGRPHLCQ

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 WR\*MDHQLWQREI\*HILVAYFAG

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 IDW\*TIRLW\*\*NLRSSRQRA\*EP

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