

SUPPLEMENTAL DATA 2

CRISPR/Cas9 enhancer deletions

CRISPR/Cas9 protospacer primer design

Protospacer and PCR primer sequences used to build tandem gRNA constructs. DNA sequencing files of the CRM mutants used in this study.

Light blue = sequence complementary to the fly genome

primer 1: col_dap-CRM

5' **tatataggaaagatatccgggtgaactc** **ggaattggttttcgtagcc** **gttttagagctagaaatagcaag** 3'

primer 2: col_dap-CRM

5' **attttaacttgctatttctagctctaaaac** **catagggcagtgcatctggc** **gacgttaaattgaaaataggtc** 3'

primer 1: col_tv-CRM

5' **tatataggaaagatatccgggtgaactc** **ggattattttctagtagg** **gttttagagctagaaatagcaag** 3'

primer 2: col_tv-CRM

5' **attttaacttgctatttctagctctaaaac** **atggtgacttaggggattac** **gacgttaaattgaaaataggtc** 3'

primer 1: apS-CRM

5' **tatataggaaagatatccgggtgaactc** **ggtagacagccggaaggaga** **gttttagagctagaaatagcaag** 3'

primer 2: apS-CRM

5' **attttaacttgctatttctagctctaaaac** **tttacattaacttgctc** **gacgttaaattgaaaataggtc** 3'

primer 1: eya-CRM

5' **tatataggaaagatatccgggtgaactc** **gacgacgccgccgacacgg** **gttttagagctagaaatagcaag** 3'

primer 2: eya-CRM

5' **attttaacttgctatttctagctctaaaac** **aaacgaagtttcattgaacgacgttaaattgaaaataggtc** 3'

primer 1: dimm-CRM

5' **tatataggaaagatatccgggtgaactc** **gttggtgtaaaattgagtc** **gttttagagctagaaatagcaag** 3'

primer 2: dimm-CRM

5' **attttaacttgctatttctagctctaaaac** **aacctaaatcttggaggc** **gacgttaaattgaaaataggtc** 3'

primer 1: Nplp1-CRM

5' **tatataggaaagatatccgggtgaactc** **gtatataaagtcgagggtcc** **gttttagagctagaaatagcaag** 3'

primer 2: Nplp1-CRM

5' **attttaacttgctatttctagctctaaaac** **acagtaccgctggetccaac** **gacgttaaattgaaaataggtc** 3'

Sequenced CRM deletions

col-dAp-CRM mutant 2.5

Green: primers to amplify the enhancer region and the deleted fragment.

Light blue: gRNA location

Red: deleted sequence

catttcgtgctctcattcgtgacca

agcaggtgagttcaaaaatatttcaattagttat**ggatgaactca**acataaattataagaaatggtgctataact

agcaacggaacatacat**gtttagaaa**attagaaaatcataaataatatacattaataaactcaagttttaac

cttacacaactgaaagaagtaatgcccaaacatctaattgaatagggtgagtaatttctgcacagaaaact
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taaataaatgagcaactgtaggttacatacttctgatgcttacaattgaaatatttaatacaataatatta
catttcaaaaaaaaaaaaaaaaaacatagattggtttattgaaaggtcacaatgctctttagaattttatcata
attagaacaatcaataattataactgccaaaaaagggtatacacagctctgtatttcataaagtgcatttcc
aatacgttgcctatgtaattttcaacaagctg**gcattacattgtaacccgtgctcc**

col-Tv-CRM mutant stock 7.2

Green: primers to amplify the enhancer region and the deleted fragment.

Light blue: gRNA location

Red: deleted sequence

cacgcactacttaagccaatctaccaccttaattccgttttttcttttgaacacatgaaaa

attcaattccttagatttatattaatctaattgaaatccacaaatttgtgccatttgttgcagaagtatttt
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aatccaattgtaacaatttgaatcaaatccgggggcacgccaccgaaagggggtggcatgggttaagggtca
tgggttccatgacagctgtcg

apS-CRM mutant stock 3.1

Green: primers to amplify the enhancer region and the deleted fragment.

Light blue: gRNA location

Red: deleted sequence

cacctaaagcggctcctagatataccggataccctagcataccggattttactgtataaaaggaagttgc
gatcgaagctatatgatattttatgggtatgctgcaaccacatgctgatacaaaatcaagaatgatcacttata
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ggcaatttagaattgggctgataatcagctccggtacataagtcgctttattgccttattatgcacagtggtcattg
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gtttgtctattgttcgctccgacttttcttccactgcttttacagggaaggacaagtattaatgtaaaatggtaac
tggtcatctgaggcgcatttgggtctggctcgggg

eya-CRM mutant stock 3.5

Green: primers to amplify the enhancer region and the deleted fragment.

Light blue: gRNA location

Red: deleted sequence

ctcaggatcacagaatccagcttctgggtatgctgtagtcgacgcccttcgacgttccgccaatggctgcgttgtttctgggttaa
ccgttggcaggcctatgaaatggtgcttgaaccactcggccgtccggaaaacaacaacattgaggcatcgtgacaaattgaattgt
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at t t t t c t a a c t t t t g t t t g t a t t t a c t a t g t a t g a t t a c a t t a a t c t g a t t a c g g a t a g c a a t g g g c t g g a a a t a c a t t a t c a a t c a c a t t a c
t t t c g a t t a t t c a a a a t a a c a t t t t a t t a t t t c a t t g a t t a c a t t c g g t t t a a c c t c g a a t c t t t c a t c g t a t a a c c a a a t t a a a g c a t t g
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