

Supplementary Materials: Cre Fused with RVG Peptides Mediates Targeted Genome Editing in Mouse Brain Cells In Vivo

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Table S1. List of oligos for pET-RVG-Cre and pET-wtCre construction.

Oligo ID	Oligo Sequence
RVG-Cre-F	5'-GAGATATAccatgggcTACACCATCTGGATGCCGAAAACCCGCGTCCGGGTACCCCGTCCGACATCTTCACCAACTCTCGTGGTAAACGTGCTTCTAACGGTGGTGGTggcca-3'
RVG-Cre-R	5'-ggcTACACCATCTGGATGCCGAAAACCCGCGTCCGGGTACCCCGTCCGACATCTTCACCAACTCTCGTGGTAAACGTGCTTCTAACGGTGGTGGTggccata-3'
Cre-F	5'-catggcggcca-3'
Cre-R	5'-tatggccc-3'

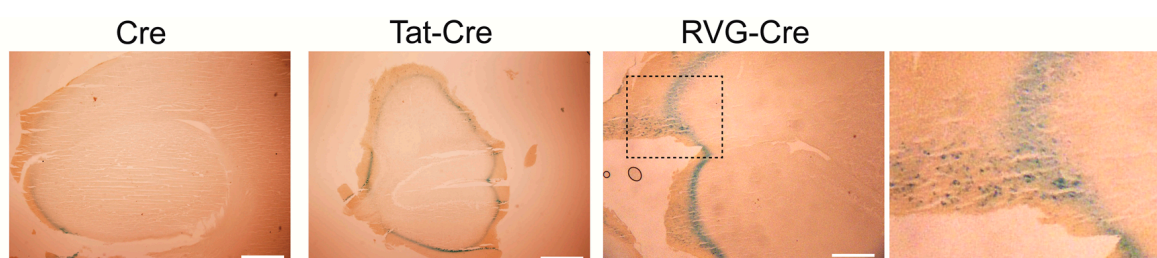


Figure S1. Sections of whole-mount brain staining from *Rosa26^{lacZ}* mice injected with RVG-Cre, TAT-Cre and Cre proteins, respectively ($n = 3$). RVG-Cre mainly targeted to the cerebral cortex. Scale bar is 200 μ M.

Full sequences of RVG-Cre Cassette:

5'-atgggcTACACCATCTGGATGCCGAAAACCCGCGTCCGGGTACCCCGTCCGACATCTTCACCAACTCTCGTGGTAAACGTGCTTCTAACGGTGGTGGTggccatatggctagcatgactggtggacagcaaatgggtcgggatccgaattcactgtccaatttactgaccgtacacaaaattgctgcattaccggtcgatgcaacgagtgatgaggttcgcagaacctgatggacatgttcaggatcgccaggcggtttctgagcatactggaaaatgcttctgcccgttcggtggcgatggtgcaagtgaataaccggaaatggttcccgcagaacctgaagatgttcgagattatcttctatatcttcaggcgcggtctggcagtaaaaactatccagcaacatttggccagctaacatgcttcatctgcggtccgggtgccacgaccaagtacagcaatgctgtttcactggttatgcgccgatccgaaaagaaaacgttgatgcccgtgaacgtgcaaacaggctctagcgttcgaacgactgatttcgaccaggttcgttactcatggaaaatagcagctgcccaggatatactggaattctgggattgcttataacacctgttacgtatagccgaaatgccaggatcagggtaagatactcactgactgacggtgggagaatgtaatacattggcagaacgaaaacgtggttagcaccgaggtgtagagaaggcacttagcctgggtaactaaactggtcagcgatggtttccgtctctggtgtagctgatgacccaataactacctggtttccgggtcagaaaaatggtgtgccgcgcatctgccaccagccagctatcaactcgccctggaaggatgtttgaagcaactatcattgatttacggcgtaaggatgactctggtcagagatacctggcctggtcggacacagtgcccgtgctggagccgcgagatggcccgcgtggagtccaataaccggagatcatgcaagctggtggtggaaccaatgtaataattgtcatgaaataatccgtaacctggatagtgaaacaggggcaatggtgcgctgctggaagatggcgatgggcccactcagcaccaccaccactga-3'

Full Sequences of TAT-Cre Cassette:

5'-atgggcaggaagaagcggagacagcgacgaagaggccatagtgctagcatgactggtggacagcaaatgggtcgggatccgaattcactgtccaatttactgaccgtacacaaaattgctgcattaccggtcgatgcaacgagtgatgaggttcgaagaacctgatggacatgttcaggatcgccaggcggtttctgagcatactggaaaatgcttctgcccgttcggtggcgatggtgcaagtgaataaccggaaatggttcccgcagaacctgaagatgttcgagattatcttctatatcttcaggcgcggtctggcagtaaaaactatccagcaacatttggccagctaacatgcttcatctgcggtccgggtgccacgaccaagtacagcaatgctgtttcactggttatgcccggatccgaaaagaaaacgttgatgcccgtgaacgtgcaaacaggctctagcgttcgaacgactgatttcgaccaggttcgttactcatggaaaatagcagctgcccaggatatactggaattctggcattctgggattgcttataacacctgttacgtatagccgaaatgccaggatcagggtaagatactcactgactgacggtgggagatgtaatacattggcagaacgaaaacgtggttagcaccgaggtgtagagaaggcacttagcctggggtaactaaactggtcagcgat

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accaccaccactga-3'

Full Sequences of Cre Cassette:

5'-atgggcggccatatggctagcatgactggtggacagcaaatgggtcgggatccgaattccatgtccaattactgaccgtacacaaaattg
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