Supplementary Material

Data Sheet S1. Sequence of codon optimized *SpCas9* gene

>Codon optimized SpCas9
ATGGATAAGAAGTACTCAATCGGCCTCGATATCGGTACAAACAGCGTTGGCTGGGCCGTTATCACCGACGAATATAAGGTTCCGAGCAAGAAGT
TCAAGGTTCTGGGAAACACCGACAGGCACAGCATCAAGAAGAATCTTATAGGGGCTCTCCTTTTCGATAGTGGAGAGACTGCTGAGGCGACCCG
TCTCAAGAGGACCGCTCGTAGGAGGTACACCCGTCGGAAGAATCGTATCTGCTACCTCCAGGAGATCTTCTCAAATGAGATGGCCAAGGTAGAT
GACAGCTTCTTCCACCGACTTGAAGAGTCCTTCCTCGTGGAAGAAGACAAGAAGCATGAGCGTCACCCTATCTTCGGAAACATAGTAGATGAGG
TTGCTTACCATGAGAAGTACCCAACTATCTACCACCTTCGAAAGAAGTTGGTTGATTCCACCGACAAGGCGGATCTCCGCCTTATCTACTTGGC
CTTAGCTCATATGATCAAGTTCCGTGGCCACTTCTTGATCGAGGGCGATTTAAACCCAGATAATAGCGATGTTGATAAGCTATTCATCCAGCTC
GTGCAGACCTACAATCAGTTATTCGAGGAGAACCCTATCAACGCAAGCGGAGTCGATGCAAAGGCGATCCTTTCTGCCCGACTCAGCAAGTCCA
GACGACTCGAGAACCTCATCGCTCAGCTCCCAGGTGAGAAGAAGAACGGCTTATTCGGAAATCTCATCGCACTCTCATTGGGACTCACCCCTAA
CTTCAAGTCAAATTTCGACTTGGCCGAGGATGCTAAGTTACAGCTCTCCAAGGATACCTACGATGACGATCTCGACAACCTCTTGGCGCAGATC
GGTGACCAGTACGCTGATTTGTTCCTCGCCGCTAAGAATCTTTCAGATGCTATCCTCCTTTCCGACATCCTCAGGGTCAACACCGAGATCACCA
AGGCCCCACTCAGCGCTTCCATGATCAAGCGCTACGATGAGCATCACCAGGACTTGACCCTCCTTAAGGCATTAGTTCGACAGCAGCTCCCTGA
GAAGTACAAGGAGATCTTCTTCGACCAGTCAAAGAACGGGTACGCAGGTTACATCGATGGGGGAGCTAGCCAGGAGGAGTTCTACAAGTTCATC
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GCTCTATCCCACATCAGATCCACTTGGGAGAGCTTCATGCCATCTTGAGGAGGCAGGAGGATTTCTACCCTTTCTTAAAGGACAACCGTGAGAA
GATCGAGAAGATCTTGACCTTCCGAATCCCATACTACGTCGGGCCTCTCGCACGTGGCAATAGCCGTTTCGCATGGATGACCCGGAAGTCCGAG
GAGACTATCACCCCATGGAACTTCGAGGAGGTGGTCGACAAGGGTGCTTCAGCACAGTCCTTCATCGAGCGCATGACCAATTTCGATAAGAACC
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GATGCGAAAGCCTGCCTTCCTCTCAGGAGAGCAGAAGAAGGCTATCGTGGATTTACTTTTCAAGACCAATCGAAAGGTCACCGTTAAGCAGTTA
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ATTTGCTAAAGATCATTAAGGACAAGGATTTCCTTGATAACGAGGAGAATGAGGACATCTTAGAGGATATCGTGTTAACCTTGACCTTATTCGA
GGACAGGGAGATGATCGAGGAGAGGCTTAAGACCTACGCTCACCTCTTCGACGATAAGGTCATGAAGCAGCTTAAACGTCGCCGTTATACTGGT
TGGGGACGTTTGTCTCGAAAGTTGATCAATGGCATCAGGGATAAGCAGTCTGGCAAGACCATCTTAGATTTCTTGAAGTCCGACGGCTTCGCTA
ACCGCAATTTCATGCAGCTGATCCATGACGATAGTTTGACATTCAAGGAGGACATCCAGAAGGCACAGGTGTCTGGACAGGGTGATAGTCTTCA
TGAGCACATCGCAAACTTAGCCGGGAGCCCAGCCATCAAGAAGGGTATCTTACAGACCGTGAAGGTTGTGGATGAGTTGGTGAAGGTCATGGGC
CGGCACAAGCCTGAGAATATCGTCATCGAGATGGCCCGTGAGAATCAGACCACCCAGAAGGGACAGAAGAACTCCCGAGAGCGTATGAAGCGAA
TCGAGGAGGGCATCAAGGAGTTAGGAAGCCAGATCCTCAAGGAGCATCCTGTTGAGAACACCCAGTTGCAAAATGAAAAGCTCTACCTTTACTA
CCTCCAGAATGGAAGAGACATGTACGTGGATCAGGAGTTAGACATCAACCGTTTAAGTGACTACGATGTCGATCACATCGTGCCACAGAGCTTC
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ACCAAGTACGACGAAAATGATAAGCTTATCCGAGAGGTTAAGGTGATTACCTTAAAGTCTAAGTTAGTCTCCGATTTCCGAAAGGACTTCCAGT
TCTACAAAGTTCGTGAGATTAACAATTACCATCATGCTCACGATGCATACCTCAACGCAGTGGTCGGGACTGCTTTGATTAAGAAGTACCCAAA
GCTCGAGTCGGAGTTCGTGTACGGTGATTACAAGGTTTACGACGTGCGTAAGATGATCGCTAAGTCCGAGCAGGAGATCGGAAAGGCAACCGCT
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ACGGCGAGACTGGAGAAATTGTCTGGGATAAGGGGCGAGATTTCGCCACAGTGCGCAAAGTATTGTCCATGCCACAAGTGAATATCGTCAAGAA
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GAAGGATTTAATCATCAAGCTCCCTAAGTACAGCCTCTTCGAGTTAGAGAACGGACGTAAGCGGATGCTTGCAAGTGCCGGGGAGTTACAGAAG
GGAAATGAGCTCGCCCTGCCAAGCAAGTACGTCAACTTCTTATACTTAGCTAGCCATTACGAGAAGTTGAAGGGCAGTCCTGAGGACAACGAGC
AGAAGCAGTTGTTCGTGGAGCAGCATAAGCACTACCTCGATGAGATCATCGAGCAGATCAGCGAGTTCTCCAAGAGGGTGATCTTAGCAGATGC
CAATTTAGACAAGGTCCTCAGTGCATACAACAAGCATAGGGACAAACCAATCCGTGAGCAGGCAGAGAATATCATCCATTTATTCACGTTGACG
AATCTCGGAGCTCCCGCTGCCTTCAAGTACTTCGATACAACAATTGATCGTAAACGATATACGTCTACAAAGGAGGTGTTAGATGCCACTCTCA
TCCATCAGTCCATCACTGGACTGTACGAGACACGCATTGACTTGAGTCAGCTAGGAGGTGACTAG