

Identification of anti-norovirus genes in human cells using genome-wide CRISPR activation screening

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Trim7 cDNA sequences:

DNA sequence for Trim7 isoform 1 codon optimized:

ATGGCGGCGGTAGGCCCGCGCACCGGACCGGGCACGGGCGCGGAAGCACTGGCGCTTGCTGCTG
AATTGCAGGGAGAAGCCACTTGTCTATTTGTCTCGAACTTTTCAGAGAGCCGGTAAGCGTTGA
ATGCGGCCATTCTTTCTGCCGCGCGTGCATAGGCCGATGCTGGGAGCGGCCCGGTGCCGGAAGT
GTCGGAGCTGCAACCCGCGCACCGCCCTTCCCTTTGCCCTGCCCTCAATGCCGAGAGCCCGCAC
GACCGTCCCAATTGCGCCCAAATCGCCAACCTGGCCGCGAGTAGCAACACTTCTGCGCCGATTTTC
TTTGCCGGCTGCCGCCCGCGGAACATGGTAGCCAGGCTGCTGCCGCGAGGGCCGCGCCGCT
AGGTGCGGACAACACGGTGAGCCATTTAAGCTCTATTGCCAGGACGACGGGCGCGCAATTTGTG
TAGTGTGCGACCGGGCCAGAGAACATCGCGAACATGCCGTCTTGCCGCTCGATGAGGCGGTCCA
GGAAGCGAAAGAACTGCTTGAATCAAGGTTGCGGGTCCCTCAAGAAGGAGCTTGAAGACTGTGAA
GTATTTTCGATCCACGGAAAAAAGGAGTCCAAAGAACTTTTGAAGCAAATGGCCGCCGAGCAGG
AGAAGGTCGGTGCCGAGTTCAGGCGTTGCGCGCATTCCCTTGTCGAACAAGAGGGCAGATTGCT
CGGACGCTTGAGGAACTGTCAAGGGAAAGTGGCCCAAAGCAGAATGAAAATCTCGCCCAACTG
GGGTGGAAATAACTCAACTGAGTAAACTGTCTCTCAGATACAAGAGACTGCACAGAAACCAG
ACTTGATTTCCCTCCAAGAGTTCAGTCAACGTTGAGCCGATGCTCAAATGTACCCGGGCCAAA
ACCCACGACTGTCTCAAGTGAGATGAAAAATAAGGTTTGGAAATGTCTCTCTCAAGACGTTTGT
CTCAAGGGTATGCTTAAGAAGTTTAAAGAGGATCTGCGGGGGGAATTGGAGAAGGAGGAAAAG
TAGAGCTGACTTTGGATCCCGACACTGCCAATCCGAGGTTGATTCTTTCCCTTGATCTTAAAG
CGTTCGGTTGGGTGAGCGCGCGCAGGATTTGCCCAACCACCCTTGTCGGTTTCGACACAAATACG
AGGGTGTCTCGCCAGTTGCGGTTTTTCTTCAGGGCGGCATCATTGGGAAGTTGAAGTCGGATCTA
AGGACGGGTGGGCTTTCGGCGTAGCTCGGGAAAGCGTGAGGAGGAAGGGGCTGACACCGTTTAC
TCCGGAGGAAGGGGTATGGGCTTTGCAGCTTAACGGGGGCCAATATTGGGCAGTCACTAGTCCC
GAGCGATCTCCTCTGTCTGTGCCATCTTTCTAGAGTTAGGGTGGCGTTGGACCTCGAGGTTG
GCGCGGTGTCAATCTACGCAGTGAAGACATGCGGCATTTGTATACTTTCCGCGTCAATTTTCA
AGAACGGGTCTTTCCACTCTTTAGCGTGTGCTCTACAGGCACCTACTTGCGAATATGGCCG

DNA sequence for Trim7 isoform 4 codon optimized:

ATGGCTGCTGTCGGTCCACGGACCGGCCCGGTACAGGTGCAGAAGCACTTGCGTTGGCGGCCG
AACTTCAGGGGGAGGCGACGTGTAGCATCTGTCTTGAATTGTTCCGAGAGCCCGTTAGCGTGGA
GTGCGGACACTCTTTTTGCCGCGCTTGCATCGGGAGATGTTGGGAGCGCCCTGGTGCAGGAAGT
GTAGGCGCTGCTACGCGAGCGCCTCCATTTCCGCTGCCATGTCCACAGTGTGAGAAACCCGCAC
GACCATCCAGCTTCGGCCAAATCGCCAATTGGCAGCTGTGGCCACCCTGCTTAGGCGCTTCTC
ACTGCCAGCGGCCGCACCAGGAGAACATGGGAGCCAGGCCGCAGCCGCCAGAGCTGCCGCAGCG
AGATGCGGGCAGCATGGAGAGCCATTCAAACCTCTATTGCCAGGATGACGGGCGAGCCATCTGCG
TAGTATGTGACAGAGCACGAGAGCATAGAGAACACGCAGTGTCCCTCTGGATGAGGCCGTACA
AGAGGCGAAAGAACTGCTCGAATCAAGGCTTAGGGTTCTCAAGAAGGAGTTGGAAGACTGCGAG
GTTTTTAGGTCTACAGAGAAAAAAGAAAGCAAGGAGCTTCTTGTCTCTCAGGCACCTGCTGGTC
CACCGTGGGACATAACGGAGGCG

sgRNAs used in this study

Gene Name	Guide I.D.	Guide Sequence
TRIM7	Guide A	GAGCGCAGATCCGGGGCGCA
TRIM7	Guide B	GCTGGTGGAGCGCAGATCCG
MUC1	Guide A	TCCCCAACCATTCCTGGGTA
MUC1	Guide B	CTCCCCAACCATTCCTGGGT
LRRC15	Guide A	GTACCCTGTAGTGTGAGCCC
LRRC15	Guide B	GTGCAGTGCCTGCATGTCCC
PLSCR1	Guide A	GGACCCACGAGACTACTGGA
PLSCR1	Guide B	AGGGTGAAGGAGCTGGAGGA
HOXC11	Guide A	AGCACTTCGCAGACGTAGGA
HOXC11	Guide B	GCACTTCGCAGACGTAGGAG
GBP2	Guide A	GGAACCTTCCACTTTATCAT
GBP2	Guide B	TGACAGCTGTGCTGGTAAGA
MX1	Guide A	CAGAAACGAAACCTAGCTCC
MX1	Guide B	ACTCACAGACCCTGTGCTGA
BLNK	Guide A	TTATTAAAGTTTACACAAAG
BLNK	Guide B	ATCTGGATAGCCAGCCAGCT
CD4	Guide A	CATGTTCCCTGAGAGCCTGG
CD4	Guide B	ATGTTCCCTGAGAGCCTGGG
CD45	Guide A	CTTCTCCAAAATACTGTAA