

Product datasheet for KN216008LP

CCR5 Human Gene Knockout Kit (CRISPR)

Product data:

OriGene Technologies, Inc.

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Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	CCR5
Locus ID:	1234
Components:	 KN216008G1, CCR5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN216008G2, CCR5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN216008LPD, donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. Homologous arm and Luciferase-Puro sequences: pUC vector backbone in gray; Left arm sequence in blue; Luciferase-Puro in green; Right arm in violet GGAGGATCGC TTGAGCCCAG GAGTTCGAGA CCAGCCTGGG CAACATAGTG TGATCTTGTA TCTATAAAAA TAAACAAAAT TAGCTTGGTG TGGTGGCGCC TGTAGTCCCC AGCCACTTGG AGGGGTGAGG TGAGAGGATT GCTTGAGCCC GGGATGGTCC AGGCTGCAGT GAGCCATGAT CGTGCCACTG CACTCCAGCC TGGGCGACAG AGTGAGACCC TGTCTCACAA CAACAACAAC AACAACAAA AGGCTGAGCT GCACCATGCT TGACCCAGT TCTTAAAATT GTTGTCAAAG CTTCATTCAC TCCATGGTGC TATAGAGCAC AAGATTTTAT TTGGTGAGAT GGTGCTTTCA TGAATTCCCC CAACAGAGCC AAGCTCTCCA TCTAGTGGAC AGGGAAGCTA GCAGCAAACC TTCCTTAACATT GTTGTCAAAACTT CATTGCTTGG CCAAAAAGAG AGTTAATTCA ATGTAGACAT CTATGTAGGC AATTAAAAAC CTATTGATGT ATAAAACAGT TTGCATTCAT GGAGGGCAAC TAAATACATT CTAGGACATT ATAAAAGATC ACTTITTATT TATGCACAGG GTGGAACAAG CAAATGGCAG CCCGCCTCCT GCCTCGCTC ACTCACTGG TGTCACTAT GGTGTTTGG GGCAACAAG CAAATGCCAG CCGCCTCCT GCCTCGCTC TATAAAAGATC ACTTITTATT TATGCACAGG GTGGAACAAG CAAATGCCAG CCGCCTCCT GCCTCGCTC TATAAAAGATC ACTTTTATT TATGCACAGG GTGGAACAAG CAAATGCCAG CCGCCTCCT GCCTCGCTC TACCACTGG TGTCATCTT TGGTTTTGTG GGCAACAAG CAACTGCC TGTTTTTCC TTCTTACTGT CCCCTTCAG CACATAG CATCACCTGC TCAACCTGGC CATCTCTGAC CTGTTTTCC TTCTACTGT CCCCTTCGG GCTCACTAG CTGCCCCA GTGGGACTTT GAAATACAA TGTGTCAACT CTTGACAGGG CTCTATTTA TAGGCTTGTT CTCTGGGACC AGGGACTT CCTCCTGAC AATGGATAGG TACCTGGC CCCCTTCTGG GCTCACTAG CTGCCCCCA GTGGGACTTT GCAACTGC CTTTTCC TTCTACTGT CCCCTTCGG GCTCATG CTGCCCCCA GTGGGACCTT CTCTCTGCC CATCGCAAGG TACCTGGC CCCCTTCTGG GCTCACTTG CTCCTGCCCA GTGGGACCTT GCACCTGGC TTTGCAACTGG CCCCTTGG GCTCATG CTGCC
	GGTGGTGGCT GTGTTTGCGT CTCTCCCAGG AATCATCTTT ACCAGATCTC AAAAAGAAGG TCTTCATTAC ACCTGCAGCT CTCATTTTCC ATACAGTCAG TATCAATTCT GGAAGAATTT CCAGACATTA AAGATAGTCA TCTTGGGGCT GGTCCTGCCG CTGCTTGTCA TGGTCATCTG CTACTCGGGA ATCCTAAAAA CTCTGCTTCG GTGTCGAAAT

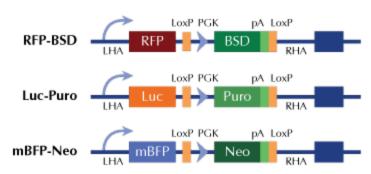
GE100003, scramble sequence in pCas-Guide vector



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	CCR5 Human Gene Knockout Kit (CRISPR) – KN216008LP
Disclaimer:	These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.
RefSeq:	<u>NM 000579, NM 001100168</u>
UniProt ID:	<u>P51681</u>
Synonyms:	CC-CKR-5; CCCKR5; CCR-5; CD195; CKR-5; CKR5; CMKBR5; IDDM22
Summary:	This gene encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. This protein is expressed by T cells and macrophages, and is known to be an important co-receptor for macrophage-tropic virus, including HIV, to enter host cells. Defective alleles of this gene have been associated with the HIV infection resistance. The ligands of this receptor include monocyte chemoattractant protein 2 (MCP-2), macrophage inflammatory protein 1 alpha (MIP-1 alpha), macrophage inflammatory protein 1 beta (MIP-1 beta) and regulated on activation normal T expressed and secreted protein (RANTES). Expression of this gene was also detected in a promyeloblastic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation. This gene is located at the chemokine receptor gene cluster region. An allelic polymorphism in this gene results in both functional and non-functional alleles; the reference genome represents the functional allele. Two transcript variants encoding the same protein have been found for this gene. [provided by

Product images:



Donor Vector Edited Chromosome

RefSeq, Jul 2015]

RFP, Luc, and mBFP will be under native gene promoter

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