

Product datasheet for **KN216008**

CCR5 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	CCR5
Locus ID:	1234
Components:	<p>KN216008G1, CCR5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAATAATTGATGTCATAGAT</p> <p>KN216008G2, CCR5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTCACATTGATTTTTGGC</p> <p>KN216008D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

```

GGAGGATCGC TTGAGCCCAG GAGTTCGAGA CCAGCCTGGG CAACATAGTG TGATCTTGTA TCTATAAAAA
TAAACAAAAT TAGCTTGGTG TGGTGGCGCC TGTAGTCCCG AGCCACTTGG AGGGGTGAGG TGAGAGGATT
GCTTGAGCCC GGGATGGTCC AGGCTGCAGT GAGCCATGAT CGTGCCACTG CACTCCAGCC TGGGCGACAG
AGTGAGACCC TGTCTACAA CAACAACAAC AACACAACAAA AGGCTGAGCT GCACCATGCT TGACCCAGTT
TCTTAAAATT GTTGCAAAG CTCATTAC TCCATGGTGC TATAGAGCAC AAGATTTTAT TTGGTGAGAT
GGTGCTTTCA TGAATTCCC CAACAGAGCC AAGCTCTCCA TCTAGTGAC AGGGAAGCTA GCAGCAAACC
TTCCCTTAC TACAAAATT CATTGCTTGG CCAAAAAGAG AGTTAATTCA ATGTAGACAT CTATGTAGGC
AATTA AAAAC CTATTGATGT ATAAAACAGT TTGCATTAT GGAGGGCAAC TAAATACATT CTAGGACTTT
ATAAAGATC ACTTTTTATT TATGCACAGG GTGGAACAAG CAAATCGCAG CCCGCTCCT GCCTCCGCTC
TACTACTGG TGTTTACTT TGGTTTTGTG GGCAACATGC TGGTCATCCT CATCCTGATA AACTGCAAAA
GGCTGAAGAG CATGACTGAC ATCTACCTGC TCAACCTGGC CATCTCTGAC CTGTTTTTCC TTCTTACTGT
CCCCTTCTGG GCTCACTATG CTGCCGCCA GTGGGACTTT GAAATACAA TGTGTCAACT CTTGACAGGG
CTCTATTTTA TAGGCTTCT CTCTGGAATC TTCTTCATCA TCCTCCTGAC AATCGATAGG TACCTGGCTG
TCGTCCATGC TGTGTTTGT TAAAAGCCA GGACGGTAC CTTTGGGGTG GTGACAAGTG TGATCACTTG
GGTGGTGGCT GTGTTTGCCT CTCTCCAGG AATCATCTT ACCAGATCTC AAAAAGAAGG TCTTCATTAC
ACCTGCAGCT CTCATTTTCC ATACAGTCAG TATCAATTCT GGAAGAATTT CCAGACATTA AAGATAGTCA
TCTTGGGGCT GGTCTCGCC CTGCTTGTC TGGTCATCTG CTACTCGGGA ATCCTAAAAA CTCTGCTTCC
GTGTCGAAAT

```

GE100003, scramble sequence in pCas-Guide vector



[View online »](#)

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: [NM_000579](#), [NM_001100168](#)

UniProt ID: [P51681](#)

Synonyms: CC-CKR-5; CCCR5; 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 RefSeq, Jul 2015]

Product images:

