

Product datasheet for SC316730

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CCR5 (NM_001100168) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CCR5 (NM 001100168) Human Untagged Clone

Tag: Tag Free Symbol: CCR5

Synonyms: CC-CKR-5; CCCKR5; CCR-5; CD195; CKR-5; CKR5; CMKBR5; IDDM22

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF within SC316730 sequence for NM_001100168 edited (data generated by

NextGen Sequencing)

ATGGATTATCAAGTGTCAAGTCCAATCTATGACATCAATTATATACATCGGAGCCCTGCCAAAAAATCA ATGTGAAGCAAATCGCAGCCCGCCTCCTGCCTCCGCTCTACTCACTGGTGTTCATCTTTGGTTTTTGTGGG AACCTGGCCATCTCTGACCTGTTTTTCCTTCTTACTGTCCCCTTCTGGGCTCACTATGCTGCCGCCCAGT GGGACTTTGGAAATACAATGTGTCAACTCTTGACAGGGCTCTATTTTATAGGCTTCTTCTCTGGAATCTT CTTCATCATCCTCCTGACAATCGATAGGTACCTGGCTGTCGTCCATGCTGTTTTGCTTTAAAAGCCAGG ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGTGGCTGTTTTGCGTCTCCCCAGGAA TCAATTCTGGAAGAATTTCCAGACATTAAAGATAGTCATCTTGGGGCTGGTCCTGCCGCTGCTTGTCATG GTCATCTGCTACTCGGGAATCCTAAAAACTCTGCTTCGGTGTCGAAATGAGAAGAAGAGGCACAGGGCTG TGAGGCTTATCTTCACCATCATGATTGTTTATTTTCTCTTCTGGGCTCCCTACAACATTGTCCTTCTCCT GAACACCTTCCAGGAATTCTTTGGCCTGAATAATTGCAGTAGCTCTAACAGGTTGGACCAAGCTATGCAG GTGACAGAGACTCTTGGGATGACGCACTGCTGCATCAACCCCATCATCTATGCCTTTGTCGGGGAGAAGT TCAGAAACTACCTCTTAGTCTTCCCAAAAGCACATTGCCAAACGCTTCTGCAAATGCTGTTCTATTTT CCAGCAAGAGGCTCCCGAGCGAGCAAGCTCAGTTTACACCCGATCCACTGGGGAGCAGGAAATATCTGTG **GGCTTGTGA**

Clone variation with respect to NM_001100168.1

Restriction Sites: Please inquire ACCN: NM 001100168

Insert Size: 1200 bp





CCR5 (NM_001100168) Human Untagged Clone - SC316730

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: The open reading frame of this clone has been fully sequenced and found to be a perfect

match to the protein associated with this reference, NM_001100168.1.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001100168.1, NP 001093638.1</u>

3p21.31

 RefSeq Size:
 3451 bp

 RefSeq ORF:
 1059 bp

 Locus ID:
 1234

 UniProt ID:
 P51681

Cytogenetics:

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, GPCR, Transmembrane

Protein Pathways: Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Endocytosis



Gene 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]

Transcript Variant: This variant (B) differs in the 5' UTR compared to variant A. Both variants encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by published experimental evidence.