

## Product datasheet for **RG223291**

### CCR5 (NM\_000579) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CCR5 (NM_000579) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CCR5
Synonyms:	CC-CKR-5; CCCR5; CCR-5; CD195; CKR-5; CKR5; CMKBR5; IDDM22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223291 representing NM_000579 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATTACAAGTGCAAGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGCCAAAAATCA  
ATGTGAAGCAAATCGCAGCCCGCTCCTGCCTCCGCTCTACTCACTGGTGTTCATCTTTGGTTTTGTGGG  
CAACATGCTGGTCATCCTCATCCTGATAAACTGCAAAAGGCTGAAGAGCATGACTGACATCTACCTGCTC  
AACCTGGCCATCTCTGACCTGTTTTCTTCTTACTGTCCCTTCTGGGCTCACTATGCTGCCGCCAGT  
GGGACTTTGAAATACAATGTGTCAACTTTGACAGGGCTCTATTTATAGGCTTCTTCTGGAATCTT  
CTTCATCATCCTCCTGACAATCGATAGGTACCTGGCTGTGCTCCATGCTGTGTTTGTCTTAAAGCCAGG  
ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGTGGCTGTGTTTGCCTCTCTCCAGGAA  
TCATCTTTACCAGATCTCAAAAAGAAGGTCTTCATTACACCTGCAGCTCTCATTTTCCATACAGTCAGTA  
TCAATTCTGGAAGAATTTCCAGACATTAAGATAGTCACTTTGGGGCTGGTCTGCCGCTGCTTGTTCATG  
GTCATCTGCTACTCGGAATCCTAAAACCTCTGCTTCGGTGTGCAAAAGAGAAGAGGACAGGGCTG  
TGAGGCTTATCTTACCATCATGATTGTTATTTCTTCTTCTGGGCTCCCTACAACATTGCTTCTCTCT  
GAACACCTTCCAGGAATCTTTGGCCTGAATAATTGCAGTAGCTAACAGGTTGGACCAAGCTATGCAG  
GTGACAGAGACTTTGGGATGACGCACTGCTGCATCAACCCCATCTATGCCTTTGTCCGGGAGAAAT  
TCAGAAACTACCTCTTAGTCTTCTTCCAAAAGCACATTGCCAAACGCTTCTGCAAAATGCTGTTCTATTTT  
CCAGCAAGAGGCTCCCGAGCGAGCAAGCTCAGTTTACACCCGATCCACTGGGGAGCAGGAAATATCTGTG  
GGCTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >RG223291 representing NM\_000579  
 Red=Cloning site Green=Tags(s)

```
MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVIFGFVGNMLVILILINCKRLKSMTDIYLL
NLAISDLFFLLTVPFWAHYAAAQWDFGNTMCQLLTGLYFIFGFFSGIFFIILLTIDRYLAVVHAVFALKAR
TVTFGVVTSVITWVVAVFASLPGIIFTRSQKEGLHYTCSSHPYSQYQFWKNFQTLKIVILGLVLP LLVM
VICYSGILKTL LRCRNEKKRHRVRLIFTIMIVYFLFWAPYNI VLLLNTFQE FFLNCCSSNR LDQAMQ
VTETLGMTHCCINPIIYAFVGEKFRNYLLVFFQKHI AKRFCKCCSIFQ EAPERASSVYTRSTGEQEISV
GL
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000579

**ORF Size:** 1056 bp

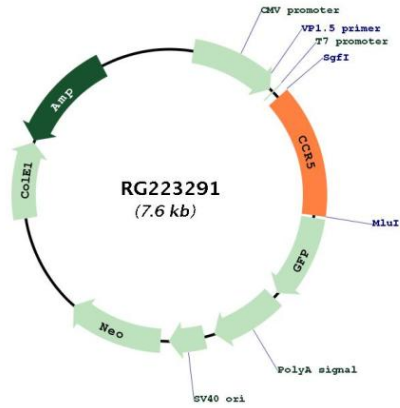
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000579.3</a> , <a href="#">NP_000570.1</a>
<b>RefSeq Size:</b>	3686 bp
<b>RefSeq ORF:</b>	1059 bp
<b>Locus ID:</b>	1234
<b>UniProt ID:</b>	<a href="#">P51681</a>
<b>Cytogenetics:</b>	3p21.31
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, GPCR, Transmembrane
<b>Protein Pathways:</b>	Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Endocytosis
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for RG223291