

## Product datasheet for MR205485

### Cxcr4 (NM\_009911) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cxcr4 (NM_009911) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cxcr4
Synonyms:	b2b220Clo; CD184; Cmkar4; LESTR; PB-CKR; PBSF/SDF-1; Sdf1r
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205485 representing NM_009911 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAACCGATCAGTGTGAGTATATACACTTCTGATAACTACTCTGAAGAAGTGGGTCTGGAGACTATG  
ACTCCAACAAGGAACCCGTCCGGGATGAAAACGTCCATTTCAATAGGATCTTCTGCCACCATCTA  
CTTCATCATCTTCTTACTGGCATAGTCGGCAATGGATTGGTGATCCTGGTCATGGGTACCAGAAGAAG  
CTAAGGAGCATGACGGACAAGTACCGGCTGCACCTGTCAGTGGCTGACCTCCTTTGTCATCACACTCC  
CCTTCTGGGCAGTTGATGCCATGGCTGACTGGTACTTTGGGAAATTTTTGTGAAGGCTGCCATATCAT  
CTACACTGTCAACTCTACAGCAGCGTTTCATCCTGGCCTTCATCAGCCTGGACCGGTACCTCGCCATT  
GTCCACGCCACCAACAGTCAAAGGCCAAGGAACTGCTGGCTGAAAAGGCACTATGTGGGCGTCTGGA  
TCCCAGCCCTCCTCTGACTATACCTGACTTTCATCTTTGCCGACGTGAGCCAGGGGGACATCAGTCAGGG  
GGATGACAGGTACATCTGTGACCGCCTTACCCCGATAGCCTGTGGATGGTGGTGTTC AATTCCAGCAT  
ATAATGGTGGGTCTATCCTGCCCGCATCGTCATCCTCTCCTGTTACTGCATCATCATCTAAGCTGT  
CACACTCCAAGGGCCACCAGAAGCGCAAGGCCCTCAAGACGACAGTCATCCTCATCTAGCTTTCTTTGC  
CTGCTGGCTGCCATATTATGTGGGATCAGCATCGACTCCTTCATCCTTTTGGGAGTCATCAAGCAAGGA  
TGTGACTTCGAGAGCATTGTGCACAAGTGGATCTCCATCACAGAGGCCCTCGCCTTCTTCCACTGTTGCC  
TGAACCCATCCTCTATGCCTTCTCGGGCCAAGTTCAAAGCTCTGCCAGCATGCACTCAACTCCAT  
GAGCAGAGGCTCCAGCCTCAAGATCCTTTCCAAAGGAAAGCGGGTGGACTCTTCCGTCTCCACGGAG  
TCAGAATCCTCCAGTTTTCACTCCAGC

**ACGGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



[View online »](#)

**Protein Sequence:** >MR205485 representing NM\_009911  
 Red=Cloning site Green=Tags(s)

MEPISVSIYTS DNYSEE VSGDYDSNKEPCFRDENVHFNRIFLPTIYFIIFLTGIVGNLVLVMGYQKK  
 LRSMTDKYRLHLSVADLLFVITLFPWAVDAMADWYFGKFLCKAVHIIYTVNLYSSVLILAFISLDRYLAI  
 VHATNSQRPRKLLAEKAVYVGVWIPALLLTIPDFIFADVSQGDISQDDRYICDRLYPDSLWMVVFQFQH  
 IMVGLILPGIVILSCYCIISKLSHSGKHQKRKALKTTVILILAFFACWLPYYVVISIDSFILLGVIKQG  
 CDFESIVHKWISITEALAFFHCCLNPILYAF LGAKFKSSAQHALNMSRGSLLKILSKGKRGGHSSVSTE  
 SESSSFHSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_009911

**ORF Size:** 1077 bp

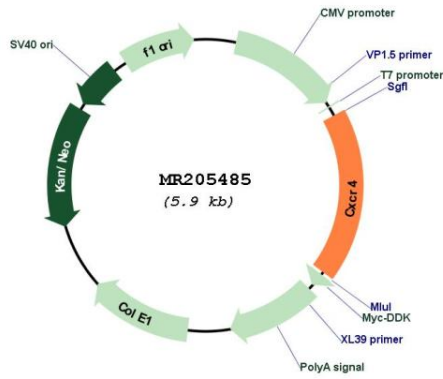
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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_009911.2</a>
<b>RefSeq Size:</b>	1821 bp
<b>RefSeq ORF:</b>	1080 bp
<b>Locus ID:</b>	12767
<b>UniProt ID:</b>	<a href="#">P70658</a>
<b>Cytogenetics:</b>	1 56.43 cM
<b>MW:</b>	40.9 kDa
<b>Gene Summary:</b>	Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation (PubMed:8962122, PubMed:9295051, PubMed:9103415). Involved in the AKT signaling cascade (By similarity). Plays a role in regulation of cell migration, e.g. during wound healing. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (By similarity). Involved in hematopoiesis and in cardiac ventricular septum formation (PubMed:9634237, PubMed:9634238, PubMed:9689100). Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells (PubMed:9634237). Involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival (PubMed:9634238, PubMed:9689100).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205485