

Product datasheet for **MR200291**

Cxcl10 (NM_021274) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cxcl10 (NM_021274) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cxcl10
Synonyms: C7; CRG-2; gIP-10; Ifi10; INP10; IP-10; IP10; mob-1; Scyb10
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR200291 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAACCCAAGTGCTGCCGTCATTTCTGCCTCATCCTGCTGGGTCTGAGTGGGACTCAAGGGATCCCTC
 TCGCAAGGACGGTCCGCTGCAACTGCATCCATATCGATGACGGGCCAGTGAGAATGAGGGCCATAGGGAA
 GCTTGAAATCATCCCTGCGAGCCTATCCTGCCACGTGTTGAGATCATTGCCACGATGAAAAGAATGAT
 GAGCAGAGATGTCTGAATCCGGAATCTAAGACCATCAAGAATTTAATGAAAGCGTTAGCCAAAAAGGT
 CTAAGAGGCTCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR200291 protein sequence
 Red=Cloning site Green=Tags(s)

MNPSSAAVIFCLILLGLSGTQGIPLARTVRCNCIHDDGPVRMRAIGKLEIIPASLSCPVEIIATMKKND
 EQRCLNPESKTIKMLKAFSQKRSKRAP

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:



ACCN: NM_021274

ORF Size: 294 bp

OTI Disclaimer: 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.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

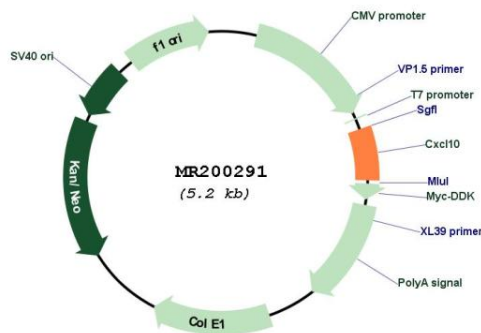
RefSeq: [NM_021274.2](#)

RefSeq Size: 1120 bp

RefSeq ORF: 297 bp
 Locus ID: 15945
 UniProt ID: [P17515](#)
 Cytogenetics: 5 46.57 cM
 MW: 10.8 kDa

Gene Summary: Pro-inflammatory cytokine that is involved in a wide variety of processes such as chemotaxis, differentiation, and activation of peripheral immune cells, regulation of cell growth, apoptosis and modulation of angiostatic effects (By similarity) (PubMed:28623423). Plays thereby an important role during viral infections by stimulating the activation and migration of immune cells to the infected sites (PubMed:18624292, PubMed:19017990, PubMed:28468883). Mechanistically, binding of CXCL10 to the CXCR3 receptor activates G protein-mediated signaling and results in downstream activation of phospholipase C-dependent pathway, an increase in intracellular calcium production and actin reorganization. In turn, recruitment of activated Th1 lymphocytes occurs at sites of inflammation (By similarity). Activation of the CXCL10/CXCR3 axis plays also an important role in neurons in response to brain injury for activating microglia, the resident macrophage population of the central nervous system, and directing them to the lesion site. This recruitment is an essential element for neuronal reorganization (PubMed:15456824).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR200291