

Product datasheet for MC208298

Ccr2 (NM_009915) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ccr2 (NM_009915) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ccr2
Synonyms:	Cc-ckr-2; Ccr2a; Ccr2b; Ckr2; Ckr2a; Ckr2b; Cmkbr2; mJe-r
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208298 representing NM_009915 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGACAATAATATGTTACCTCAGTTCATCCACGGCATACTATCAACATCTCATTCTCTATTTACAC
GAAGTATCCAAGAGCTTGATGAAGGGGCCACCACCGTATGACTACGATGATGGTGAGCCTTGTCATAA
AACCAGTGTGAAGCAAATGGAGCTTGGATCCTGCCTCCACTCTACTCCCTGGTATTCATCTTTGGTTTT
GTGGGCAACATGTTGGTCATTATAATTCTGATAGGCTGTAAAAAGCTGAAGAGCATGACTGATATCTATC
TGCTCAACTTGGCCATCTCTGACCTGCTCTTCTGCTCACATTACCATTCTGGGCTCACTATGCTGCAAA
TGAGTGGGCTTTGGGAATATAATGTGTAAGTATTCACAGGGCTCTATCACATTGGTTATTTGGTGGA
ATCTTTTTTATTATCCTCCTGACAATTGATAGGTAAGTACTTGGCTATTGTTTATGCTGTGTTTGGCTTAAAG
CCAGGACAGTTACCTTTGGGGTGATAACAAGTGTAGTCACTTGGGTGGTGGCTGTGTTTGGCTCTTACC
AGGAATCATATTTACTAAATCCAACAAGATGATCACCATTACACCTGTGGCCCTTATTTACACAACATA
TGGAAGAATTTCCAACAATAATGAGAAATATCTTGAGCCTGATCCTGCCTCTACTTGTGATGGTATCT
GCTACTCAGGAATCTCCACACCCTGTTTCGCTGTAGGAATGAGAAGAAGAGGCACAGGGCTGTGAGGCT
CATCTTTGCCATCATGATTGTCTACTTTCTCTTCTGGACTCCATAACAATATTGTTCTCTTCTTGACCACC
TTCCAGGAATCCTTGGGAATGAGTAAGTGTGATTGACAAGCACTTAGACCAGCCATGCAGGTGACAG
AGACTCTTGGAAATGACACACTGCTGCATTAATCCTGTCATTTATGCCTTTGTTGGAGAGAAGTTCCGAAG
GTATCTCTCCATATTTTTAGAAAAGCACATTGCTAAACGCTCTGCAAACAGTGCCAGTTTTCTATAGG
GAGACAGCAGATCGAGTGAGCTCTACATTCCTTCCACTGGGGAGCAAGAGGTCTCGGTTGGTTGT
AA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_009915
Insert Size:	1122 bp
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).
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:	<ol style="list-style-type: none">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:	BC138803 , AAI38804
RefSeq Size:	2242 bp
RefSeq ORF:	1122 bp
Locus ID:	12772
UniProt ID:	P51683
Cytogenetics:	9 75.05 cM

Gene Summary:

Key functional receptor for CCL2 but can also bind CCL7 and CCL12 chemokines (PubMed:8631787, PubMed:8662823, PubMed:8996246). Its binding with CCL2 on monocytes and macrophages mediates chemotaxis and migration induction through the activation of the PI3K cascade, the small G protein Rac and lamellipodium protrusion (By similarity). Also acts as a receptor for the beta-defensin DEFB106A/DEFB106B (By similarity). Regulates the expression of T-cell inflammatory cytokines and T-cell differentiation, promoting the differentiation of T-cells into T-helper 17 cells (Th17) during inflammation (PubMed:28507030). Facilitates the export of mature thymocytes by enhancing directional movement of thymocytes to sphingosine-1-phosphate stimulation and up-regulation of S1P1R expression; signals through the JAK-STAT pathway to regulate FOXO1 activity leading to an increased expression of S1P1R (PubMed:29930553). Plays an important role in mediating peripheral nerve injury-induced neuropathic pain (PubMed:29993042). Increases NMDA-mediated synaptic transmission in both dopamine D1 and D2 receptor-containing neurons, which may be caused by MAPK/ERK-dependent phosphorylation of GRIN2B/NMDAR2B (PubMed:29993042). Mediates the recruitment of macrophages and monocytes to the injury site following brain injury (PubMed:24806994, PubMed:29632244).[UniProtKB/Swiss-Prot Function]