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Product datasheet for MC208238

Ccr6 (NM_001190338) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ccr6 (NM_001190338) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ccr6
Synonyms:	CC-CKR-6; CCR-6; Cmkbr6; KY411
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208238 representing NM_001190338 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAGCACTGCTGGTTGTGTCTGTCAACAGAATAGTCCTCACATTCTTAGGACTGGAGCCTGGATAACCA CTGAGGCAGGAGTACCTGGCCAGTCTACTTTGGAGCTCAGCATTTTCTGGGGAATGAATTCCACAGAGTC CTACTTTGGAACGGATGATTATGACAACACAGAGTATTATTCTATTCCTCCAGACCATGGGCCATGCTCC CTAGAAGAGGTCAGAAACTTCACCAAGGTATTTGTGCCAATTGCCTACTCCTTAATATGTGTCTTTGGCC TCCTGGGCAACATTATGGTGGTGATGACCTTTGCCTTCTACAAGAAAGCCAGATCCATGACTGACGTCTA CCTGTTGAACATGGCCATCACAGACATACTCTTTGTCCTCACCCTACCGTTCTGGGCAGTTACTCATGCC ACCAACACTTGGGTTTTCAGCGATGCACTGTGTAAACTGATGAAAGGCACATATGCGGTCAACTTTAACT GTGGGATGCTGCTCCTGGCCTGTATCAGCATGGACCGGTACATTGCCATCGTCCAGGCAACCAAATCTTT CCGGGTACGCTCCAGAACACTGACGCACAGTAAGGTCATCTGTGTGGCAGTGTGGTTCATCTCCATCATC ATCTCAAGCCCTACATTTATCTTCAACAAGAAATACGAGCTGCAGGATCGTGATGTCTGTGAGCCACGGT ACAGGTCTGTCTCAGAGCCCATCACGTGGAAGCTGCTGGGTATGGGACTGGAGCTGTTCTTTGGGTTCTT CACCCCTTTGCTGTTTATGGTGTTCTGCTATCTGTTCATTATCAAGACCTTGGTGCAGGCCCAGAACTCC AAGAGGCACAGAGCAATCCGAGTCGTGATCGCTGTGGTTCTCGTGTTCCTGGCTTGTCAGATCCCTCACA ACATGGTCCTCCTCGTGACTGCGGTCAACACGGGCAAAGTGGGCCGGAGCTGCAGCACCGAGAAAGTCCT CGCCTACACCAGGAACGTGGCCGAGGTCCTGGCTTTCCTGCATTGCTGCCTCAACCCCGTGTTGTATGCG TTTATTGGACAGAAATTCAGAAACTACTTCATGAAGATCATGAAGGATGTGTGGTGTATGAGAAGGAAGA ATAAGATGCCTGGCTTCCTCTGTGCCCGGGTTTACTCGGAAAGCTACATCTCCAGGCAGACCAGTGAGAC CGTCGAAAATGATAATGCATCGTCCTTTACCATGTAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Restriction Sites:	SgfI-MluI
ACCN:	NM_001190338
Insert Size:	1227 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:	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:	NM_001190338.1, NP_001177267.1
RefSeq Size:	1320 bp
RefSeq ORF:	1227 bp
Locus ID:	12458
Cytogenetics:	17 A1

Gene Summary: Receptor for the C-C type chemokine CCL20. Binds to CCL20 and subsequently transduces a signal by increasing the intracellular calcium ion levels (PubMed:20068036). Although CCL20 is its major ligand it can also act as a receptor for non-chemokine ligands such as beta-defensins (PubMed:25122636). Binds to defensin DEFB1 leading to increase in intracellular calcium ions and cAMP levels. Its binding to DEFB1 is essential for the function of DEFB1 in regulating sperm motility and bactericidal activity (By similarity). Binds to defensins DEFB4 and DEFB4A/B and mediates their chemotactic effects (PubMed:20068036). The ligand-receptor pair CCL20-CCR6 is responsible for the chemotaxis of dendritic cells (DC), effector/memory T-cells and B-cells and plays an important role at skin and mucosal surfaces under homeostatic and inflammatory conditions, as well as in pathology, including cancer and various autoimmune diseases. CCR6-mediated signals are essential for immune responses to microbes in the intestinal mucosa and in the modulation of inflammatory responses initiated by tissue insult and trauma (PubMed:21376174). CCR6 is essential for the recruitment of both the proinflammatory IL17 producing helper T-cells (Th17) and the regulatory T-cells (Treg) to sites of inflammation (PubMed:19050256). Required for the normal migration of Th17 cells in Peyers patches and other related tissue sites of the intestine and plays a role in regulating effector T-cell balance and distribution in inflamed intestine (PubMed:19129757). Plays an important role in the coordination of early thymocyte precursor migration events important for normal subsequent thymocyte precursor development, but is not required for the formation of normal thymic natural regulatory T-cells (nTregs). Required for optimal differentiation of DN2 and DN3 thymocyte precursors (PubMed:24638065). Essential for B-cell localization in the subepithelial dome of Peyers-patches and for efficient B-cell isotype switching to IgA in the Peyers-patches (PubMed:27174992). Essential for appropriate anatomical distribution of memory B-cells in the spleen and for the secondary recall response of memory B-cells (PubMed:25505290). Positively regulates sperm motility and chemotaxis via its binding to CCL20 (PubMed:23765988).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (7) differs in the 5' UTR and 5' coding region and uses an alternate in-frame start codon, compared to variant 1. The resulting protein (isoform B) has a distinct N-terminus and is longer than isoform A. Sequence Note: This RefSeq record was created from genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.