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CD195 (CC-Chemokine Receptor 5) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 12D1]
Catalog # AH11102

Product Information

Application	IF, FC, IHC-F
Primary Accession	P51681
Other Accession	1234, 450802
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Clone Names	12D1
Calculated MW	40524

Additional Information

Gene ID	1234
Other Names	C-C chemokine receptor type 5, C-C CKR-5, CC-CKR-5, CCR-5, CCR5, CHEMR13, HIV-1 fusion coreceptor, CD195, CCR5, CMKBR5
Application Note	IF~~1:50~200 FC~~1:10~50 IHC-F~~N/A
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD195 (CC-Chemokine Receptor 5) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCR5 (HGNC:1606)
Synonyms	CMKBR5
Function	Receptor for a number of inflammatory CC-chemokines including CCL3/MIP-1-alpha, CCL4/MIP-1-beta and RANTES and subsequently transduces a signal by increasing the intracellular calcium ion level. May play a role in the control of granulocytic lineage proliferation or differentiation. Participates in T-lymphocyte migration to the infection site by acting as a chemotactic receptor (PubMed:30713770).
Cellular Location	Cell membrane; Multi-pass membrane protein Highly expressed in spleen, thymus, in the myeloid cell line THP-1, in the

Tissue Location	promyeloblastic cell line KG-1a and on CD4+ and CD8+ T-cells. Medium levels in peripheral blood leukocytes and in small intestine. Low levels in ovary and lung.

Background

Reacts with the N-terminal extracellular domain of CD195. The CC chemokine receptor 5 (CCR5) is a member of the CC-chemokine receptor family, and has the characteristic structure of a 7 transmembrane G protein-coupled receptor (GPCR). CCR5 regulates trafficking and effector functions of memory/effector Th1 cells, macrophages, NK cells, and immature dendritic cells. CCR5 and its ligands play an important role in viral pathogenesis. CCR5 represents the co-receptor for macrophage (M) and dual (T cell and M)-tropic immunodeficiency viruses. Together with the CD4 binding receptor, CCR5 plays a critical role in HIV entry into the target cells. Moreover, the CCR5 ligands macrophage inflammatory protein (MIP)-1 alpha, MIP-1 beta and RANTES act as endogenous inhibitors of HIV infection, making both CCR5 and its chemokine ligands attractive therapeutic targets for HIV infection. Recent studies have also highlighted the role of CCR5 in a variety of other human diseases, ranging from infectious and inflammatory diseases to cancer.

References

Samson M, et al. 1996. Biochemistry 35:3362.2. Raport CJ, et al. 1996. J. Biol. Chem. 271:17161.3. Combadiere C, et al. 1996. J. Leukoc. Biol. 60:147.4. Deng H, et al. 1996. Nature 381:661