10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CCR6 Antibody (Cytoplasmic Domain)
Rabbit Polyclonal Antibody
Catalog # ALS10100

Specification

CCR6 Antibody (Cytoplasmic Domain) - Product Information

Application	**IHC**
Primary Accession	P51684
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42kDa KDa**

CCR6 Antibody (Cytoplasmic Domain) - Additional Information

Gene ID 1235

Other Names
C-C chemokine receptor type 6, C-C CKR-6, CC-CKR-6, CCR-6, Chemokine receptor-like 3, CKR-L3, DRY6, G-protein coupled receptor 29, GPR-CY4, GPRCY4, LARC receptor, CD196, CCR6, CKRL3, CMKBR6, GPR29, STRL22

Target/Specificity
Human CCR6. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except NUP93 (44%).

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
CCR6 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

CCR6 Antibody (Cytoplasmic Domain) - Protein Information

Name CCR6

Synonyms CKRL3, CMKBR6, GPR29, STRL22

Function
Receptor for the C-C type chemokine CCL20 (PubMed:9169459). 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:25585877). 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 (PubMed:25122636). 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 pro-inflammatory IL17 producing helper T-cells (Th17) and the regulatory T-cells (Treg) to sites of inflammation. 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. 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. 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. Essential for appropriate anatomical distribution of memory B-cells in the spleen and for the secondary recall response of memory B-cells (By similarity). Positively regulates sperm motility and chemotaxis via its binding to CCL20 (PubMed:23765988).

Cellular Location
Cell membrane; Multi-pass membrane protein. Cell surface

Tissue Location
Sperm. Mainly localized in the tail and in the postacrosomal region but is also found in the midpiece and basal region in a small percentage of sperm cells. Reduced levels found in the sperms of asthenozoospermia and leukocytospermia patients (at protein level). Spleen, lymph nodes, appendix, and fetal liver. Expressed in lymphocytes, T-cells and B-cells but not in natural killer cells, monocytes or granulocytes.

Volume
50 µl

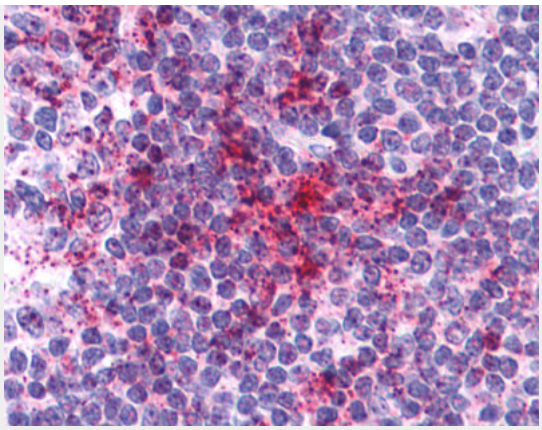
CCR6 Antibody (Cytoplasmic Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CCR6 Antibody (Cytoplasmic Domain) - Images

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Anti-CCR6 antibody ALS10100 IHC of human tonsil.

CCR6 Antibody (Cytoplasmic Domain) - Background

Receptor for a C-C type chemokine. Binds to MIP-3- alpha/LARC and subsequently transduces a signal by increasing the intracellular calcium ions level.

CCR6 Antibody (Cytoplasmic Domain) - References

Baba M.,et al.J. Biol. Chem. 272:14893-14898(1997).
Lautens L.L.,et al.Submitted (APR-1996) to the EMBL/GenBank/DDBJ databases.
Zaballos A.,et al.Biochem. Biophys. Res. Commun. 227:846-853(1996).
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Liao F.,et al.Genomics 40:175-180(1997).