

Anti-CCR6 Antibody
Catalog # ABO10586**Specification**

Anti-CCR6 Antibody - Product Information

Application	WB
Primary Accession	P51684
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for C-C chemokine receptor type 6(CCR6) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CCR6 Antibody - 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

Calculated MW

42494 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Cell membrane; Multi-pass membrane protein.

Tissue Specificity

Spleen, lymph nodes, appendix, and fetal liver. Expressed in lymphocytes, T-cells and B-cells but not in natural killer cells, monocytes or granulocytes.

Protein Name

C-C chemokine receptor type 6(C-C CKR-6/CC-CKR-6/CCR-6)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CCR6(358-374aa RQTSETADNDNASSFTM), different from the related rat and mouse sequences by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the G-protein coupled receptor 1 family.

Anti-CCR6 Antibody - Protein Information

Name CCR6

Synonyms CKRL3, CMKBR6, GPR29, STRL22

Function

Receptor for the C-C type chemokine CCL20 (PubMed: [9169459](http://www.uniprot.org/citations/9169459)). Binds to CCL20 and subsequently transduces a signal by increasing the intracellular calcium ion levels (PubMed: [20068036](http://www.uniprot.org/citations/20068036)). Although CCL20 is its major ligand it can also act as a receptor for non-chemokine ligands such as beta-defensins (PubMed: [25585877](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/25122636)). Binds to defensins DEFB4 and DEFB4A/B and mediates their chemotactic effects (PubMed: [20068036](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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 Peyer's 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 Peyer's patches and for efficient B-cell isotype switching to IgA in the Peyer's 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](http://www.uniprot.org/citations/23765988)).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell surface

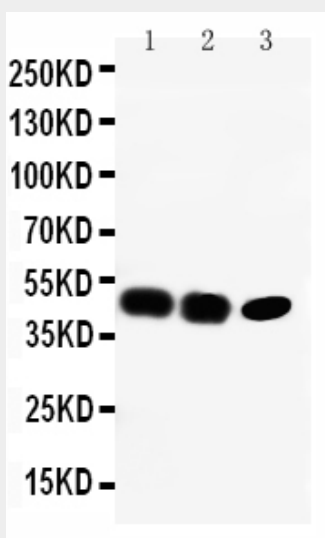
Tissue Location

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.

Anti-CCR6 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CCR6 Antibody - Images

Anti-CCR6 antibody, ABO10586, Western blotting
Lane 1: Rat Liver Tissue Lysate
Lane 2: SW620 Cell Lysate
Lane 3: CEM Cell Lysate

Anti-CCR6 Antibody - Background

CCR6, also termed CKRL3, encodes a 369-amino acid polypeptide with greatest similarity to the family of alpha-chemokine-binding receptors. Unlike most chemokine receptor genes, it is encoded by more than 1 exon. Weakly expressed as a 4-kb transcript in spleen, lymph nodes, peripheral blood lymphocytes and appendix, CCR6 gene is located at 6q27. As the receptor for MIP-3-alpha, its activation leads to phospholipase C-dependent intracellular Ca^{2+} mobilization. Additionally, CCR6 are markedly upregulated in psoriasis.