Product name: Anti-CCR5 antibody
Description: Goat polyclonal to CCR5
Host species: Goat
Specificity: This antibody binds to CCR5 receptors on human peripheral blood leukocytes as determined by immunocytochemistry.

Tested applications: Suitable for: IHC-P
Species reactivity: Reacts with: Human, Macaque monkey
Immunogen: Synthetic peptide: YQVSSPYDINYYTSEPCQKINVKQIAA, corresponding to N terminal amino acids 3-30 of Human CCR5.

Properties:
Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze/thaw cycles.
Storage buffer: Preservative: 0.1% Sodium azide
Constituent: 0.1% BSA
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications:
Our Abpromise guarantee covers the use of ab1673 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Function

Receptor for a number of inflammatory CC-chemokines including MIP-1-alpha, 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. Acts as a coreceptor (CD4 being the primary receptor) for HIV-1 R5 isolates.

Tissue specificity

Highly expressed in spleen, thymus, in the myeloid cell line THP-1, in the 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.

Involvement in disease

Genetic variation in CCR5 is associated with susceptibility to diabetes mellitus insulin-dependent type 22 (IDDM22) [MIM:612522]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

Sequence similarities

Belongs to the G-protein coupled receptor 1 family.

Post-translational modifications

Sulfated on at least 2 of the N-terminal tyrosines. Sulfation contributes to the efficiency of HIV-1 entry and is required for efficient binding of the chemokines, CCL3 and CCL4. O-glycosylated, but not N-glycosylated. Ser-6 appears to be the major site. Also sialylated glycans present which contribute to chemokine binding. Thr-16 and Ser-17 may also be glycosylated and, if so, with small moieties such as a T-antigen.

Palmitoylation in the C-terminal is important for cell surface expression, and to a lesser extent, for HIV entry.

Phosphorylation on serine residues in the C-terminal is stimulated by binding CC chemokines especially by APO-RANTES.

Cellular localization

Cell membrane.

Images

Immunohistochemistry using ab1673 on a section of normal human spleen
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors