abcam

Product datasheet

Recombinant Cow CCR5 protein ab204192

Description

Product name	Recombinant Cow CCR5 protein
Expression system	Yeast
Accession	Q8SQA6
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Cow
Sequence	PFGADTPTACCFSYVARQLSRKIVADYFETSSQCSKPGVI FQTKKGRQVC ANPTEDWVQEYITDLELNA
Predicted molecular weight	8 kDa
Amino acids	24 to 93
Additional sequence information	Mature protein without signal peptide.

Specifications

Our Abpromise guarantee covers the use of **ab204192** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Constituents: 10% Trehalose, 90% PBS
Reconstitution	Reconstitute with sterile phosphate-buffered saline containing at least 0.1% carrier protein.

General Info

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 suseptibility 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 fetaures 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.