

## Product datasheet

# Recombinant Human CCR5 protein ab158144

1 Image

### Description

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<b>Product name</b>	Recombinant Human CCR5 protein
<b>Expression system</b>	Wheat germ
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIF GFVGNML VILILINCKRLKSMTDIYLLNLAISDLFFLLTVPFWAHYAAAQ WDFGNTM CQLLTGLYFIGFFSGIFFIILLTIDRYLAVVHAVFALKARTVTF GVVTSV ITWVVAVFASLPGIIFTRSQKEGLHYTCSSHPYSQYQFWK NFQTLKVI LGLVLPLLVMVICYSGILKTLLRCRNEKKRHRVRLIFTIMVY FLFWAP YNMLLLNTFQEFFGLNNCSSSNRLDQAMQV TETLGMTHC CINPIYAFV GEKFRNYLLVFFQKHIKRFCKCCSIFQQEAPERASSVYT RSTGEQEISV GL
<b>Amino acids</b>	1 to 352
<b>Tags</b>	GST tag N-Terminus

### Specifications

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Our **Abpromise guarantee** covers the use of **ab158144** in the following tested applications.

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

<b>Applications</b>	ELISA Western blot
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<b>Form</b>	Liquid
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**Additional notes**

## Preparation and Storage

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**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.  
pH: 8.00  
Constituents: 0.31% Glutathione, 0.79% Tris HCl

## General Info

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**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 2 (IDDM2) [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.

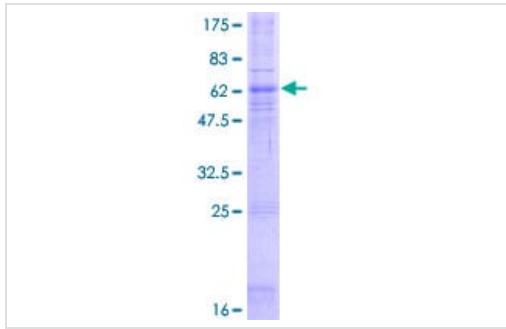
**Post-translational modifications** Sulfated on at least 2 of the N-terminal tyrosines. Sulfation contributes to the efficiency of HIV-1 entry and is required for efficient binding of the chemokines, CCL3 and CCL4. O-glycosylated, but not N-glycosylated. Ser-6 appears to be the major site. Also sialylated 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.

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## Images

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ab158144 on a 12.5% SDS-PAGE stained with Coomassie Blue.

SDS-PAGE - Recombinant Human CCR5 protein  
(ab158144)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- 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

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