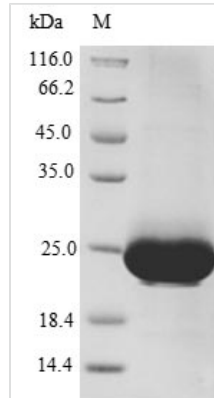




Recombinant Human C-X-C chemokine receptor type 4 (CXCR4), partial

Product Code	CSB-EP006254HU1
Relevance	Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Involved in hematopoiesis and in cardiac ventricular septum formation. Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells. Involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival. Acts as a coreceptor (CD4 being the primary receptor) for human immunodeficiency virus-1/HIV-1 X4 isolates and as a primary receptor for some HIV-2 isolates. Promotes Env-mediated fusion of the virus. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes
Abbreviation	Recombinant Human CXCR4 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P61073
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PILYAFLGAKFKTSAQHALLTSVSRGSSSLKILSKGKRGGHSSVSTESESSS
Research Area	Immunology
Source	E.coli
Target Names	CXCR4
Expression Region	303-352aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged
Mol. Weight	25.2kDa
Protein Length	Partial of Isoform 2
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

To produce recombinant Human CXCR4 protein, a well-established recombinant DNA technology is the key. A DNA template of CXCR4 was constructed with N-terminal 10xHis-SUMO tag & C-terminal Myc tag using the technique. Once the template was made, the recombinant Human CXCR4 protein could be produced with it efficiently. CUSABIO has built a strict QC system to ensure quality. The expression region is 303-352aa of the Human CXCR4. The purity of this recombinant is 90% determined by SDS-PAGE.

CXCR4 is a protein coding gene that encodes C-X-C chemokine receptor type 4 (CD_antigen: CD184). According to some studies, CXCR4 may have the following features.

The role of CXCR4 in various diseases, including cancer and WHIM syndrome. CXCR4 expression in cancer metastases appears to be due to receptor dysregulation leading to enhanced signaling. CXCR4 regulates the growth of primary and metastatic breast cancer. CXCR4 is a prognostic marker for acute myeloid leukemia. CXCR4 plays major roles in embryonic development, homeostasis and inflammation. CXCR4 plays a key role in the crosstalk between tumor cells and their respective microenvironments, suggesting that CXCR4-targeted therapeutic approaches may become clinically important in the near future. The chemokine receptor CXCR4 is essential for vascularization of the gastrointestinal tract.

Shelf Life

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