

GPCR Protein Catalogue

## CXCR4- Protein-C-X-C chemokine receptor type 4

## **Product specification**

Acronym: hCXCR4
Class: Receptor

**Origin:** Human **Molecular weight:** 40 kDa

**Application:** 

**Purity: >80%** 

**Activity:** To be tested

**Length:** 352 **TMD:** 7

Biological function: HIV virus recognition

protein and cancer biomarker

## **Product description**

Human CXCR4, C-X-C chemokine type 4 is a receptor for stromal-derived-factor-1 (SDF-1 also called CXCL12), a molecule endowed with potent chemotactic activity for lymphocytes. CXCR4 is essential for proper fetal development and is the major co-receptor for T-tropic strains of human immunodeficiency virus 1 (HIV-1). Additionally, SDF-1 and CXCR4 mediate cancer cell migration and metastasis. As most N-terminal domain of chemokine receptors are the ligand binding domain, the N-terminal domain of CXCR4 is the binding site for SDF-1.

**Protein Source:** hCXCR4 wild type protein (Human CXCR4 isoform 1).

Fig. 1: AA sequence of C-X-C chemokine receptor type 4 protein

1.0	20	.06.	40	50
MEGISTYTSD	NYTERMIGSIAD	YDSMKEPCER	PENANENKIE	<b>DETTYSLIE</b>
60	70	80	90	100
1961 VGNG1V1	INVMESTQKK INR	SMITDKYRLHL	SVADIGHTVET	LIPHWAYDAVA
110	120	130	140	150
NMA ACMELICK	Ανηντυτνηι.	YSSVIITIAFT	SLORYLATVH	ATN: QR PRKT
160	170	180	190	200
LAEKVVYVGV	WIPALLLTIP	DFIFANVSEA	DDRYICDRFY	PNDLWVVVF
210	220	230	240	250
FQHIMVGLIL	PGIVILSCYC	IIISKLSHSK	GHQKRKALKT	TVILILAFET
260	270	280	290	300
CWLPYYIGIS	IDSFILLEII	KQGCEFENTY	HKWISITEAL	AFFHCCLNPI
310	320	330	340	350
LYAFLGAKFK	TSAQHALTSV	SRGSSLKILS	KGKRGGHSSV	STESESSSFF

**Affinity Tag:** Histidine tag fused to the N-terminal end of the protein and Strep tag fused to the C-terminal end of the protein.

**Production conditions:** C-X-C chemokine receptor 4 is expressed in a cell-free expression system, in the presence of detergent. 100µg can be produced and qualified in about 1 week.

## **Formulation**

**Buffer:** Available in Tris 50mM, pH 7.5. Others buffers or customized formulation can be provided upon request.

**Customized Hydrophobic matrix:** Customized formulation with specific lipids like PEGylated or biotinylated lipids can be used upon request, as well as targeting molecules.

**Storage/Stability:** Store at +4°C for up to one week or several months at -80°C. Aliquot for storage. Do not freeze-thaw after aliquoting.

**Use restrictions:** For life science research use only.

Available sizes:  $25\mu g$ ,  $100 \mu g$ ,  $500 \mu g$ , bulk



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