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# CXCR7 Protein (AA 1-362) (rho-1D4 tag)



## **Image**



#### Overview

Quantity:	1 mg
Target:	CXCR7
Protein Characteristics:	AA 1-362
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CXCR7 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

### **Product Details**

## Sequence:

MDVHLFDYAE PGNYSDINWP CNSSDCIVVD TVQCPTMPNK NVLLYTLSFI YIFIFVIGMI
ANSVVVWVNI QAKTTGYDTH CYILNLAIAD LWVVITIPVW VVSLVQHNQW PMGELTCKIT
HLIFSINLFG SIFFLACMSV DRYLSITYFT GTSSYKKKMV RRVVCILVWL LAFFVSLPDT
YYLKTVTSAS NNETYCRSFY PEHSIKEWLI GMELVSVILG FAVPFTIIAI FYFLLARAMS
ASGDQEKHSS RKIIFSYVVV FLVCWLPYHF VVLLDIFSIL HYIPFTCQLE NVLFTALHVT
QCLSLVHCCV NPVLYSFINR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN TK
Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

#### Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Ackr3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

#### Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

- 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
- 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
- 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin-free.

Grade: Crystallography grade

## **Target Details**

Target: CXCR7

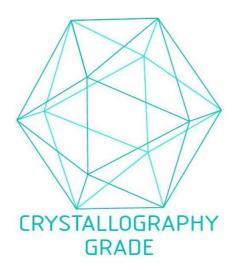
# **Target Details**

Alternative Name:	Ackr3 (CXCR7 Products)
Background:	Atypical chemokine receptor that controls chemokine levels and localization via high-affinity
	chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades,
	resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as
	interceptor (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy
	receptor. Acts as a receptor for chemokines CXCL11 and CXCL12/SDF1. Chemokine binding
	does not activate G-protein-mediated signal transduction but instead induces beta-arrestin
	recruitment, leading to ligand internalization and activation of MAPK signaling pathway.
	Required for regulation of CXCR4 protein levels in migrating interneurons, thereby adapting
	their chemokine responsiveness. In glioma cells, transduces signals via MEK/ERK pathway,
	mediating resistance to apoptosis. Promotes cell growth and survival. Not involved in cell
	migration, adhesion or proliferation of normal hematopoietic progenitors but activated by
	CXCL11 in malignant hemapoietic cells, leading to phosphorylation of ERK1/2
	(MAPK3/MAPK1) and enhanced cell adhesion and migration. Plays a regulatory role in CXCR4-
	mediated activation of cell surface integrins by CXCL12. Required for heart valve development.
	{ECO:0000269 PubMed:17804806, ECO:0000269 PubMed:18442043,
	ECO:0000269 PubMed:20161793, ECO:0000269 PubMed:21220100,
	ECO:0000269 PubMed:21246655}.
Molecular Weight:	42.8 kDa Including tag.
UniProt:	P56485
Pathways:	Myometrial Relaxation and Contraction, Negative Regulation of intrinsic apoptotic Signaling
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee
	though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the
	recombinant protein with the default tag will be insoluble our protein lab may suggest a higher
	molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible
	options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

# Images



**Image 1.** "Crystallography Grade" protein due to multi-step, protein-specific purification process