

Datasheet for ABIN7491631

CXCR7 Protein**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	CXCR7
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CXCR7 full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified.

Target Details

Target:	CXCR7
Alternative Name:	ACKR3 (CXCR7 Products)
Background:	A member of the G-protein coupled receptor family. Although this protein was earlier thought to be a receptor for vasoactive intestinal peptide (VIP), it is now considered to be an orphan receptor, in that its endogenous ligand has not been identified. The protein is also a coreceptor for human immunodeficiency viruses (HIV). Translocations involving this gene and HMGA2 on chromosome 12 have been observed in lipomas.

Target Details

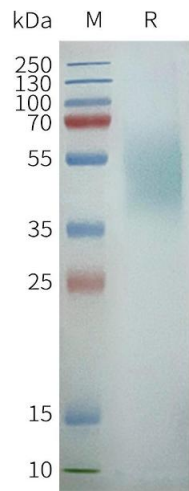
Molecular Weight:	The human full length CXCR7 protein has a MW of 41.5 kDa
UniProt:	P25106
Pathways:	Myometrial Relaxation and Contraction , Negative Regulation of intrinsic apoptotic Signaling

Application Details

Comment:	<p>Advantages of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• Highly purified membrane proteins• High solubility in aqueous solutions• High stability• Proteins are in a native membrane environment and remain biologically active• No detergent and can be used for cell-based assays• No MSP backbone proteins <p>Limitations of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• Intolerant to acids and high concentrations of divalent metal ions
Restrictions:	For Research Use only

Handling

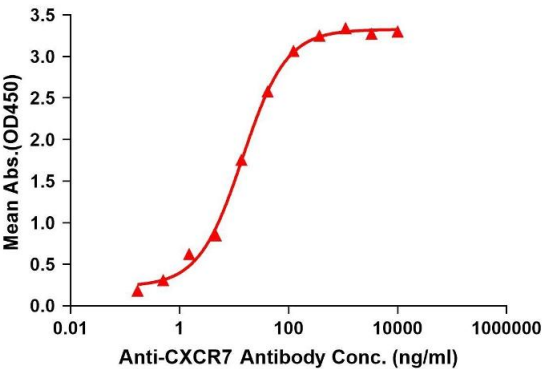
Format:	Lyophilized
Buffer:	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Expiry Date:	12 months



SDS-PAGE

Image 1. Human C-Nanodisc, Flag Tag on SDS-PAGE

ELISA assay to evaluate CXCR7-Nanodisc
0.2µg Human CXCR7-Nanodisc per well



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag C-Nanodisc (0.2 µg/per well). Serial diluted anti-C monoclonal antibody (ABIN7455354, ABIN7490734 and ABIN7490736) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-C monoclonal antibody binding with C-Nanodisc is 14.28 ng/mL.