

# Datasheet for ABIN7491619

## **CXCR1 Protein**

2 Images



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### Overview

Quantity:	100 μg
Target:	CXCR1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

## **Product Details**

Purpose:

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.

Human CXCR1 full length protein-synthetic nanodisc

### **Target Details**

Target:	CXCR1
Alternative Name:	CXCR1 (CXCR1 Products)
Background:	The protein is a member of the G-protein-coupled receptor family. This protein is a receptor for
	interleukin 8 (IL8). It binds to IL8 with high affinity, and transduces the signal through a G-
	protein activated second messenger system. Knockout studies in mice suggested that this
	protein inhibits embryonic oligodendrocyte precursor migration in developing spinal cord. This
	gene, IL8RB, a gene encoding another high affinity IL8 receptor, as well as IL8RBP, a

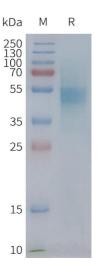
# **Target Details**

	pseudogene of IL8RB, form a gene cluster in a region mapped to chromosome 2q33-q36.
Molecular Weight:	The human full length CXCR1 protein has a MW of 39.8 kDa
UniProt:	P25024
Pathways:	cAMP Metabolic Process

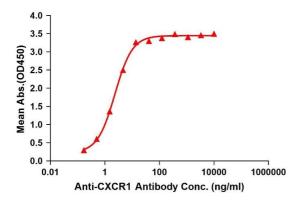
Application Detai	ls
Comment:	Advantages of Synthetic Nanodiscs:
	Highly purified membrane proteins
	High solubility in aqueous solutions
	High stability
	<ul> <li>Proteins are in a native membrane environment and remain biologically active</li> </ul>
	No detergent and can be used for cell-based assays
	No MSP backbone proteins
	Limitations of Synthetic Nanodiscs:
	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



# ELISA assay to evaluate CXCR1-Nanodisc 0.2µg Human CXCR1-Nanodisc per well



#### **SDS-PAGE**

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

#### **ELISA**

**Image 2.** Elisa plates were pre-coated with Flag Tag C-Nanodisc (0.2  $\mu$ g/per well). Serial diluted anti-C monoclonal antibody (ABIN7455369, ABIN7490794 and ABIN7490796) 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 2.330 ng/mL.