

Datasheet for ABIN7491568

**CCR7 Protein****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	CCR7
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

## Product Details

Purpose:	Human CCR7 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:	CCR7
Alternative Name:	CCR7 ( <a href="#">CCR7 Products</a> )
Background:	The protein is a member of the G protein-coupled receptor family. This receptor was identified as a gene induced by the Epstein-Barr virus (EBV), and is thought to be a mediator of EBV effects on B lymphocytes. This receptor is expressed in various lymphoid tissues and activates B and T lymphocytes. It has been shown to control the migration of memory T cells to inflamed tissues, as well as stimulate dendritic cell maturation. The chemokine (C-C motif) ligand 19

## Target Details

(CCL19/ECL) has been reported to be a specific ligand of this receptor. Signals mediated by this receptor regulate T cell homeostasis in lymph nodes, and may also function in the activation and polarization of T cells, and in chronic inflammation pathogenesis.

Molecular Weight: The human full length CCR7 protein has a MW of 42.9 kDa

UniProt: [P32248](#)

Pathways: [Regulation of Actin Filament Polymerization](#), [Positive Regulation of Immune Effector Process](#)

## Application Details

Comment: Advantages of Synthetic Nanodiscs:

- 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

Limitations of Synthetic Nanodiscs:

- Intolerant to acids and high concentrations of divalent metal ions

Restrictions: For Research Use only

## Handling

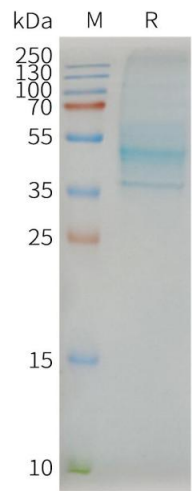
Format: Lyophilized

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.

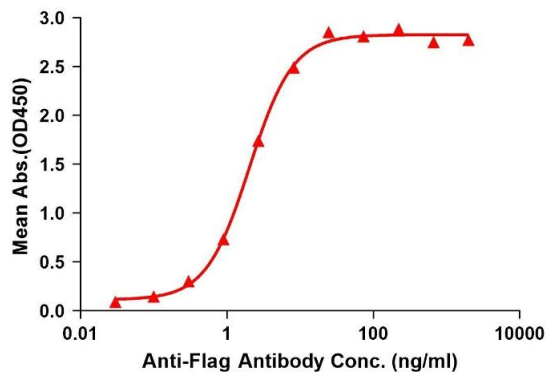
Expiry Date: 12 months



SDS-PAGE

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

**ELISA assay to evaluate CCR7-Nanodisc**  
0.2µg Human CCR7-Nanodisc per well



ELISA

**Image 2.** Elisa plates were pre-coated with Flag Tag - Nanodisc (0.2 µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with -Nanodisc is 2.044 ng/mL.