



[Go to Product page](#)

Datasheet for ABIN7491715

## CD133 Protein

### 2 Images

#### Overview

Quantity:	100 µg
Target:	CD133 (PROM1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

#### Product Details

Purpose:	Human PROM1 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:	CD133 (PROM1)
Alternative Name:	PROM1 ( <a href="#">PROM1 Products</a> )
Background:	A pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of this gene is also associated with several types of cancer. This gene is expressed from at least five alternative promoters that are

## Target Details

---

expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene.

Molecular Weight: The human full length PROM1 protein has a MW of 97.2 kDa

UniProt: [O43490](#)

## 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.

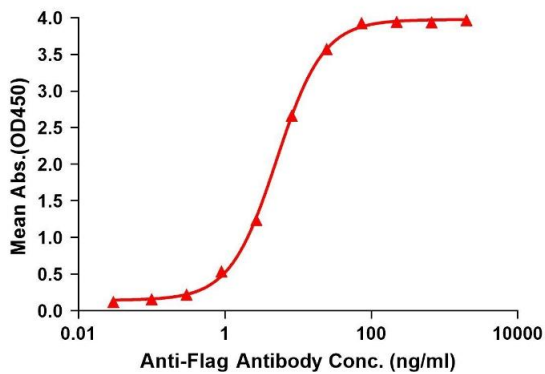
Expiry Date: 12 months



### SDS-PAGE

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

**ELISA assay to evaluate PROM1-Nanodisc**  
0.2µg Human PROM1-Nanodisc per well



### ELISA

**Image 2.** Elisa plates were pre-coated with Flag Tag P-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 P-Nanodisc is 5.105 ng/mL.