

Datasheet for ABIN7491576

CD20 Protein**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	CD20 (MS4A1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CD20 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:	CD20 (MS4A1)
Alternative Name:	CD20 (MS4A1 Products)
Background:	A member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. This gene encodes a B-lymphocyte surface molecule which plays a role in the development and differentiation of B-cells into plasma cells. This family member is localized to 11q12, among a

Target Details

cluster of family members. Alternative splicing of this gene results in two transcript variants which encode the same protein.

Molecular Weight: The human full length CD20 protein has a MW of 33.1 kDa

UniProt: [P11836](#)

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.

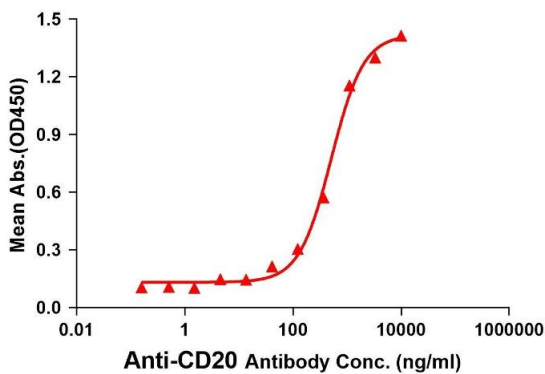
Expiry Date: 12 months



SDS-PAGE

Image 1. Human CD20-Nanodisc, Flag Tag on SDS-PAGE

ELISA assay to evaluate CD20-Nanodisc
0.2µg Human CD20-Nanodisc per well



ELISA

Image 2. Elisa plates were added with Flag Tag CD20-Nanodisc (0.2 µg/per well) on an anti-Flag monoclonal antibody pre-coated (0.5 µg/per well) plate. Serial diluted anti-CD20 monoclonal antibody ((ABIN7538770)) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CD20 monoclonal antibody binding with CD20-Nanodisc is 514.4 ng/mL.