Datasheet for ABIN7491578

# CD36 Protein (CD36)

2 Images

Go to Product page

## Overview

| | |
|---|---|
| Quantity: | 100 µg |
| Target: | CD36 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Synthetic Nanodisc |

## Product Details

| | |
|---|---|
| Purpose: | Human CD36 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: | CD36 |
| Alternative Name: | CD36 (CD36 Products) |
| Background: | The protein is the fourth major glycoprotein of the platelet surface and serves as a receptor for thrombospondin in platelets and various cell lines. Since thrombospondins are widely distributed proteins involved in a variety of adhesive processes, this protein may have important functions as a cell adhesion molecule. It binds to collagen, thrombospondin, anionic phospholipids and oxidized LDL. It directly mediates cytoadherence of Plasmodium falciparum |

## Target Details

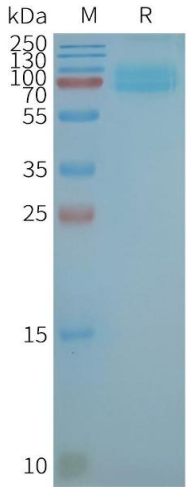
| | |
|---|---|
| | parasitized erythrocytes and it binds long chain fatty acids and may function in the transport and/or as a regulator of fatty acid transport. Mutations in this gene cause platelet glycoprotein deficiency. Multiple alternatively spliced transcript variants have been found for this gene. |
| Molecular Weight: | The human full length CD36 protein has a MW of 53.1 kDa |
| UniProt: | P16671 |
| Pathways: | TLR Signaling, Peptide Hormone Metabolism, Response to Growth Hormone Stimulus, Activation of Innate immune Response, Cellular Response to Molecule of Bacterial Origin, Regulation of Lipid Metabolism by PPARalpha, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Hepatitis C, Toll-Like Receptors Cascades, Lipid Metabolism, S100 Proteins |

## Application Details

| | |
|---|---|
| Comment: | Advantages of Synthetic Nanodiscs:<br>• Highly purified membrane proteins<br>• High solubility in aqueous solutions<br>• High stability<br>• Proteins are in a native membrane environment and remain biologically active<br>• No detergent and can be used for cell-based assays<br>• No MSP backbone proteins<br><br>Limitations of Synthetic Nanodiscs:<br>• Intolerant to acids and high concentrations of divalent metal ions |
| Restrictions: | For Research Use only |

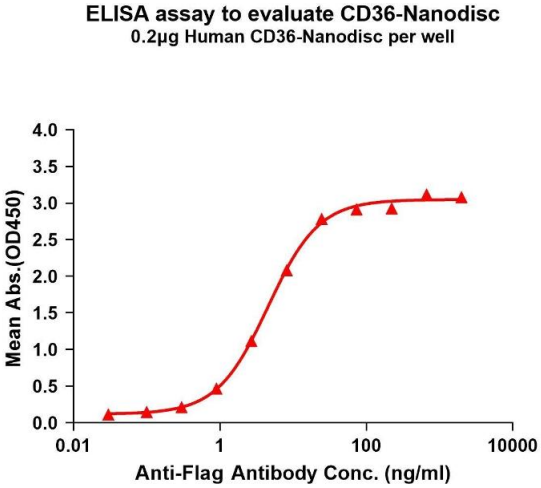
## Handling

| | |
|---|---|
| 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 CD36-Nanodisc, Flag Tag on SDS-PAGE




## ELISA

**Image 2.** Elisa plates were pre-coated with Flag Tag CD36-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 CD36-Nanodisc is 4.557 ng/mL.