

Datasheet for ABIN7491729

**SLC25A4 Protein****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	SLC25A4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

## Product Details

Purpose:	Human SLC25A4 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:	SLC25A4
Alternative Name:	SLC25A4 ( <a href="#">SLC25A4 Products</a> )
Background:	The protein functions as a gated pore that translocates ADP from the cytoplasm into the mitochondrial matrix and ATP from the mitochondrial matrix into the cytoplasm. The protein forms a homodimer embedded in the inner mitochondria membrane. Mutations in this gene have been shown to result in autosomal dominant progressive external ophthalmoplegia and familial hypertrophic cardiomyopathy.

## Target Details

Molecular Weight:	The human full length SLC25A4 protein has a MW of 33.1 kDa
UniProt:	<a href="#">P12235</a>
Pathways:	<a href="#">Proton Transport</a> , <a href="#">Dicarboxylic Acid Transport</a>

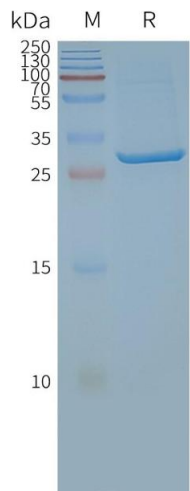
## Application Details

Comment:	<p>Advantages of Synthetic Nanodiscs:</p> <ul style="list-style-type: none"><li>• Highly purified membrane proteins</li><li>• High solubility in aqueous solutions</li><li>• High stability</li><li>• Proteins are in a native membrane environment and remain biologically active</li><li>• No detergent and can be used for cell-based assays</li><li>• No MSP backbone proteins</li></ul> <p>Limitations of Synthetic Nanodiscs:</p> <ul style="list-style-type: none"><li>• Intolerant to acids and high concentrations of divalent metal ions</li></ul>
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Restrictions:	For Research Use only
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## Handling

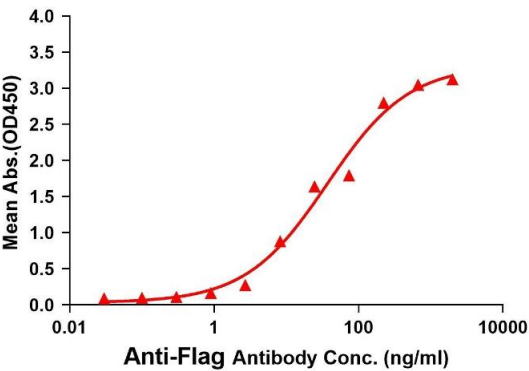
Format:	Lyophilized
Buffer:	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, 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 A4-Nanodisc, Flag Tag on SDS-PAGE

**ELISA assay to evaluate SLC25A4-Nanodisc**  
0.2µg Human SLC25A4-Nanodisc per well



ELISA

**Image 2.** Elisa plates were pre-coated with Flag Tag A4-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 A4-Nanodisc is 36.85 ng/mL.