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Datasheet for ABIN7538545

TAS1R3 Protein

2 Images

Overview

Quantity:	50 µg
Target:	TAS1R3
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human TAS1R3 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:	TAS1R3
Alternative Name:	TAS1R3 (TAS1R3 Products)
Background:	The protein encoded by this gene is a G-protein coupled receptor involved in taste responses. The encoded protein can form a heterodimeric receptor with TAS1R1 to elicit the umami taste response, or it can bind with TAS1R2 to form a receptor for the sweet taste response.
Molecular Weight:	The human full length TAS1R3 protein has a MW of 93.4 kDa

Target Details

UniProt: [Q7RTX0](#)

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

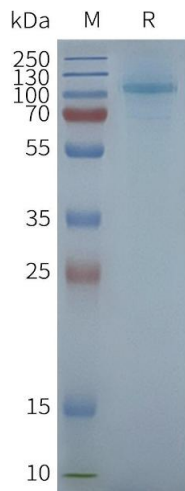
Format: Lyophilized

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.

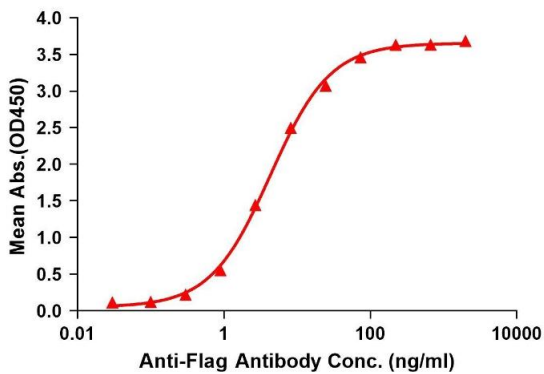
Expiry Date: 12 months



SDS-PAGE

Image 1. Human R3-Nanodisc, Flag Tag on SDS-PAGE

ELISA assay to evaluate TAS1R3-Nanodisc
0.2µg Human TAS1R3-Nanodisc per well



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag R3-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 R3-Nanodisc is 4.332 ng/mL.