

Datasheet for ABIN7538373

MRGPRX1 Protein

[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	MRGPRX1
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human MRGX1 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:	MRGPRX1
Alternative Name:	MRGX1 (MRGPRX1 Products)
Background:	Orphan receptor. Probably involved in the function of nociceptive neurons. May regulate nociceptor function and/or development, including the sensation or modulation of pain. Potently activated by enkephalins including BAM22 (bovine adrenal medulla peptide 22) and BAM (8-22)(PubMed:26582731). BAM22 is the most potent compound and evoked a large and dose-dependent release of intracellular calcium in stably transfected cells. G(alpha)q proteins

Target Details

are involved in the calcium-signaling pathway. Activated by the antimalarial drug, chloroquine. May mediate chloroquine-induced itch, in a histamine-independent manner.[UniProtKB/Swiss-Prot Function]

Molecular Weight: The human full length MRGX1 protein has a MW of 36.3kDa

UniProt: [Q96LB2](#)

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