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Datasheet for ABIN7538389

Melatonin Receptor 1B Protein (MTNR1B)

Overview

Quantity:	50 µg
Target:	Melatonin Receptor 1B (MTNR1B)
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human MTR1B 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:	Melatonin Receptor 1B (MTNR1B)
Alternative Name:	MTR1B (MTNR1B Products)
Background:	This gene encodes one of two high affinity forms of a receptor for melatonin, the primary hormone secreted by the pineal gland. This gene product is an integral membrane protein that is a G-protein coupled, 7-transmembrane receptor. It is found primarily in the retina and brain although this detection requires RT-PCR. It is thought to participate in light-dependent functions in the retina and may be involved in the neurobiological effects of melatonin. [provided by

Target Details

RefSeq, Jul 2008]

Molecular Weight: The human full length MTR1B protein has a MW of 40.2kDa

UniProt: [P49286](#)

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