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Datasheet for ABIN7538547
TAS2R38 Protein

Overview

Quantity:	50 µg
Target:	TAS2R38
Origin:	Human
Source:	Mammalian Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human T2R38 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:	TAS2R38
Alternative Name:	T2R38 (TAS2R38 Products)
Background:	This gene encodes a seven-transmembrane G protein-coupled receptor that controls the ability to taste glucosinolates, a family of bitter-tasting compounds found in plants of the Brassica sp. Synthetic compounds phenylthiocarbamide (PTC) and 6-n-propylthiouracil (PROP) have been identified as ligands for this receptor and have been used to test the genetic diversity of this gene. Although several allelic forms of this gene have been identified worldwide, there are two

Target Details

predominant common forms (taster and non-taster) found outside of Africa. These alleles differ at three nucleotide positions resulting in amino acid changes in the protein (A49P, A262V, and V296I) with the amino acid combination PAV identifying the taster variant (and AVI identifying the non-taster variant). [provided by RefSeq, Oct 2009]

Molecular Weight: The human full length T2R38 protein has a MW of 37.9kDa

UniProt: [P59533](#)

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