

Datasheet for ABIN7597138

TRPM8 Protein (DYKDDDDK Tag, Strep Tag)



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Overview

Quantity:	10 µg
Target:	TRPM8
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This TRPM8 protein is labelled with DYKDDDDK Tag, Strep Tag.
Application:	Immunogen (Imm), ELISA, Cryogenic electron microscopy (cryo-EM), Phage Display (PhD), Surface Plasmon Resonance (SPR)

Product Details

Purpose:	Human TRPM8-Strep full length protein-synthetic nanodisc
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Target Details

Target:	TRPM8
Alternative Name:	TRPM8 (TRPM8 Products)
Background:	<p>LTRPC6, LTrpC-6, TRPP8, trp-p8</p> <p>Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH . Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage-dependent</p>

Target Details

activation curves. The chemical agonist menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. In prostate cancer cells, shows strong inward rectification and high calcium selectivity in contrast to its behavior in normal cells which is characterized by outward rectification and poor cationic selectivity. Plays a role in prostate cancer cell migration (PubMed:25559186). Isoform 2 and isoform 3 negatively regulate menthol- and cold-induced channel activity by stabilizing the closed state of the channel.[UniProtKB/Swiss-Prot Function]

Molecular Weight: The human full length TRPM8-Strep protein has a MW of 127.7 kDa

UniProt: [Q7Z2W7](#)

Application Details

Comment: Advantages:

- 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
- Mammalian cell expression system ensures post- translational modifications

Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: 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