

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	TRPM8
Synonyms	LTrpC-6; LTRPC6; trp-p8; TRPP8
Description	Human TRPM8-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q7Z2W7
Expression Host	HEK293
Protein Families	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length TRPM8-Strep protein has a MW of 127.7 kDa
Formulation & Reconstitution	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. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.
Storage&Shipping	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.
Background	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 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.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate TRPM8-Strep-Nanodisc**  
0.2µg Human TRPM8-Strep-Nanodisc per well

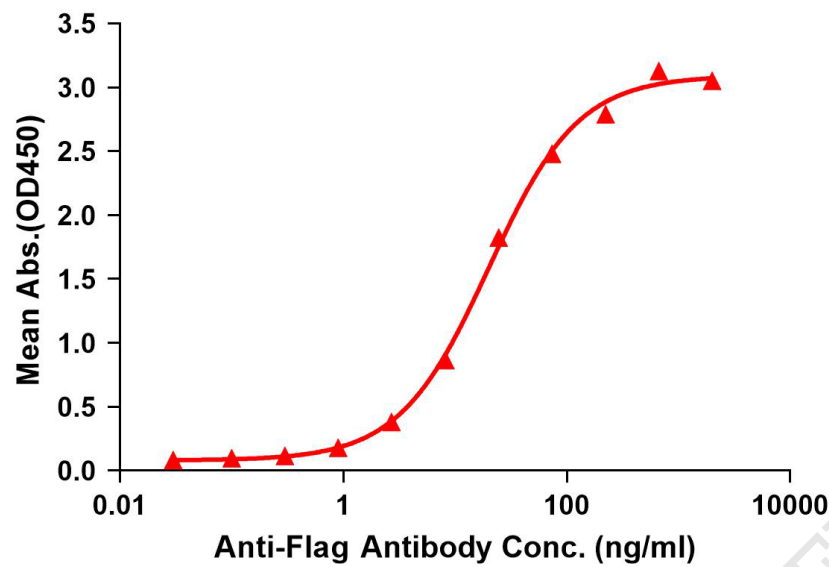


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag TRPM8-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TRPM8-Strep-nanodisc is 20.05ng/ml.

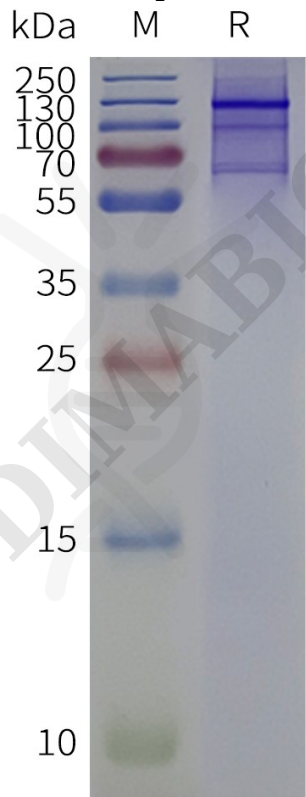


Figure 2. Human TRPM8-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

