

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	TRPA1
Synonyms	ANKTM1; FEPS; FEPS1
Description	Human TRPA1-Strep full length protein-synthetic nanodisc
Uniprot ID	O75762
Protein Families	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length TRPA1-Strep protein has a MW of 127.5 kDa
Delivery	In Stock
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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	The structure of the protein is highly related to both the protein ankyrin and transmembrane proteins. This protein is activated by a large variety of structurally unrelated electrophilic and non-electrophilic chemical compounds. Electrophilic ligands activate TRPA1 by interacting with critical N-terminal Cys residues in a covalent manner, whereas mechanisms of non-electrophilic ligands are not well determined. May be a component for the mechanosensitive transduction channel of hair cells in inner ear, thereby participating in the perception of sounds. Probably operated by a phosphatidylinositol second messenger system.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate TRPA1-Strep-Nanodisc 0.2 μ g Human TRPA1-Strep-Nanodisc per well

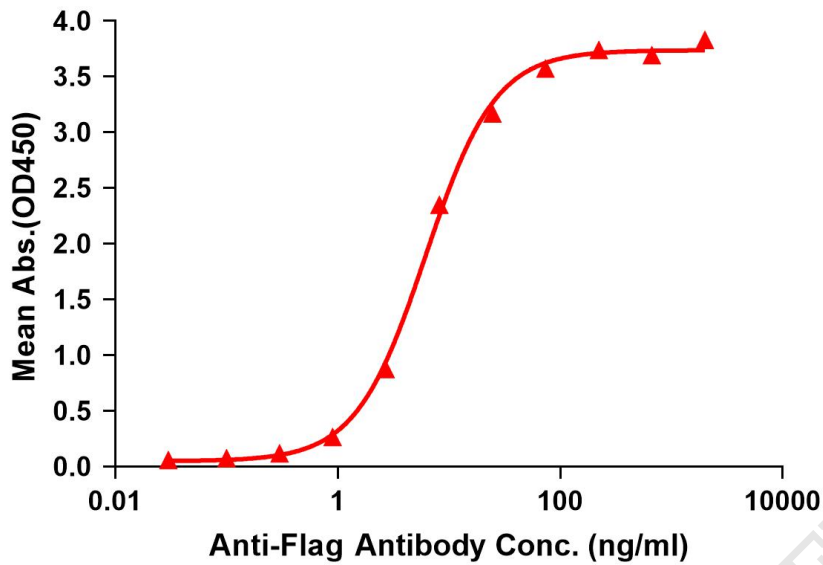


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag TRPA1-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TRPA1-Strep-nanodisc is 6.181ng/ml.



Figure 2. Human TRPA1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

