

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	TRPA1
Synonyms	ANKTM1; FEPS; FEPS1
Description	Human TRPA1-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	O75762
Expression Host	HEK293
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 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.
Formulation & Reconstitution	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.
Storage & Shipping	
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**  
0.2µg Human TRPA1-Strep-Nanodisc per well

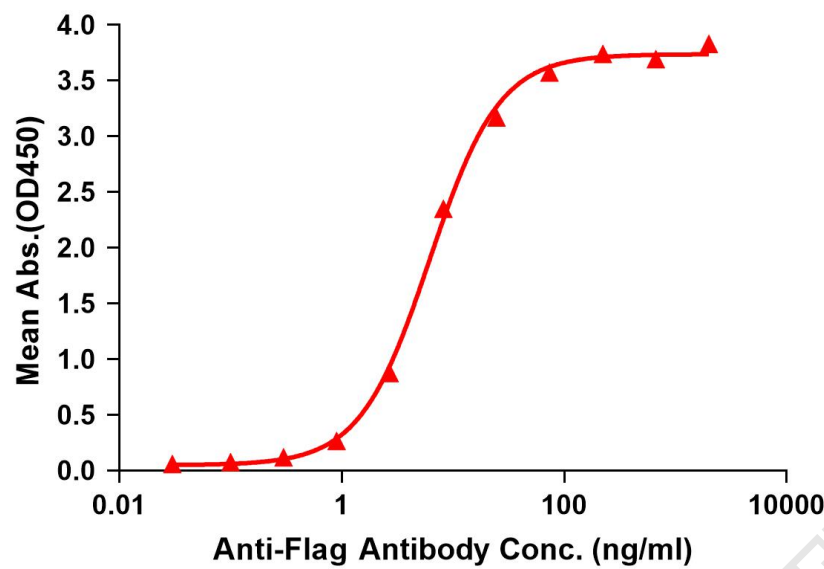


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag TRPA1-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding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

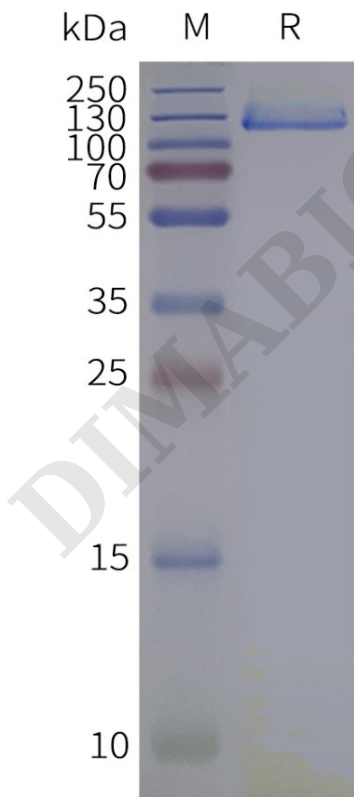


Figure 2. Human TRPA1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

