

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<b>Target</b>	TRPA1
<b>Synonyms</b>	ANKTM1; FEPS; FEPS1
<b>Description</b>	Human TRPA1 full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	O75762
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length TRPA1 protein has a MW of 127.5 kDa
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



**ELISA assay to evaluate TRPA1-Nanodisc**  
0.2µg Human TRPA1-Nanodisc per well

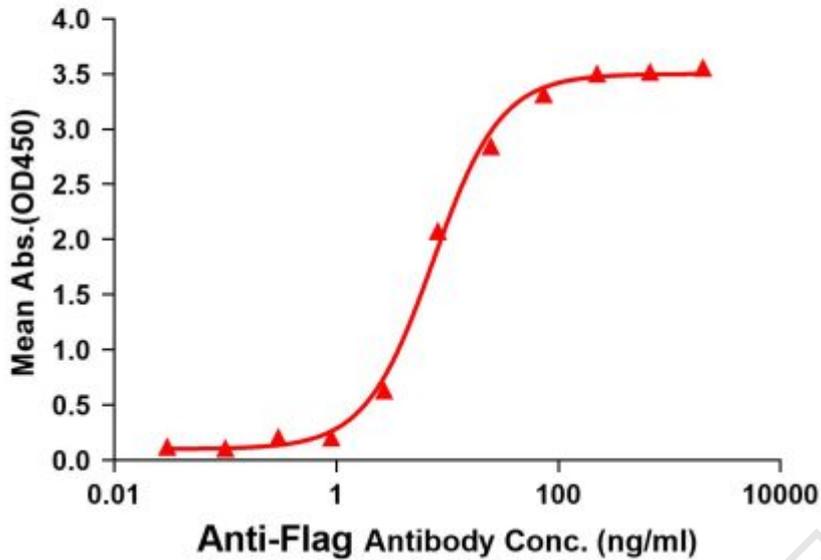


Figure1. Elisa plates were pre-coated with Flag Tag TRPA1-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TRPA1-Nanodisc is 7.433ng/ml.



Figure2. Human TRPA1-Nanodisc, Flag Tag on SDS-PAGE

