

## PRODUCT INFORMATION

<b>Tag</b>	N-MBP Tag, C-Flag&Strep Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	TRPV1
<b>Synonyms</b>	VR1
<b>Description</b>	Human MBP-TRPV1-Strep full length protein-synthetic nanodisc
<b>Uniprot ID</b>	Q8NER1
<b>Protein Families</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane
<b>Protein Pathways</b>	Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length MBP-TRPV1-Strep protein has a MW of 135.0 kDa
<b>Delivery</b>	In Stock
<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>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<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>	Capsaicin, the main pungent ingredient in hot chili peppers, elicits a sensation of burning pain by selectively activating sensory neurons that convey information about noxious stimuli to the central nervous system. The protein is a receptor for capsaicin and is a non-selective cation channel that is structurally related to members of the TRP family of ion channels. This receptor is also activated by increases in temperature in the noxious range, suggesting that it functions as a transducer of painful thermal stimuli in vivo. Four transcript variants encoding the same protein, but with different 5' UTR sequence, have been described for this gene.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate MBP-TRPV1-Strep-Nanodisc 0.2µg Human MBP-TRPV1-Strep-Nanodisc per well

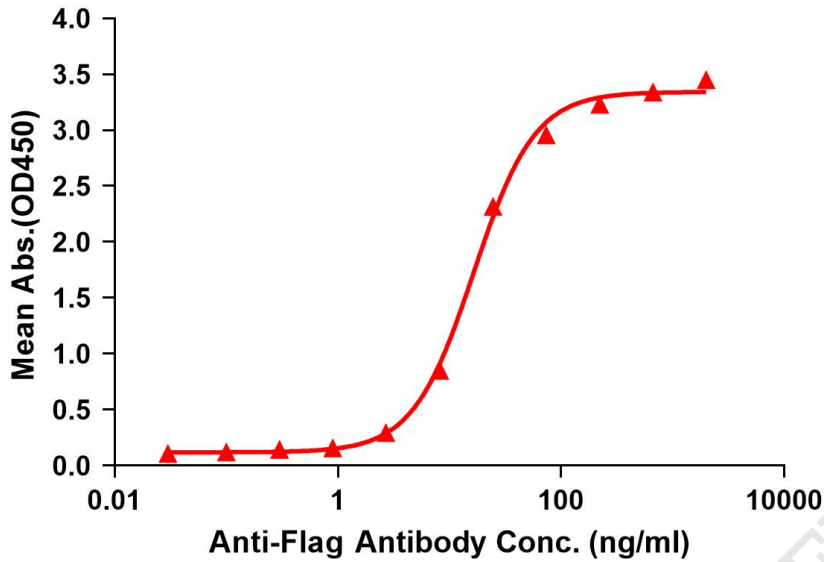


Figure 1. Elisa plates were pre-coated with N-MBP Tag, C-Flag&Strep Tag MBP-TRPV1-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with MBP-TRPV1-Strep-Nanodisc is 16.57ng/ml.

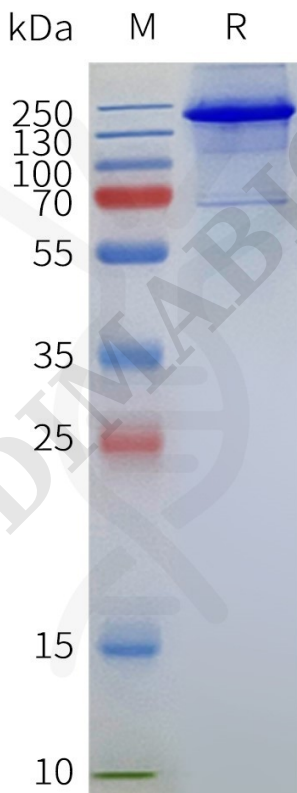


Figure 2. Human MBP-TRPV1-Strep-Nanodisc with N-MBP Tag, C-Flag&Strep Tag on SDS-PAGE

