

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Target</b>	TRPV1
<b>Synonyms</b>	VR1
<b>Description</b>	Human TRPV1 full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q8NER1
<b>Expression Host</b>	HEK293
<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 TRPV1 protein has a MW of 95.0 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 of reconstitution.
<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 encoded by this gene 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 TRPV1-Nanodisc**  
0.2 $\mu$ g Human TRPV1-Nanodisc per well

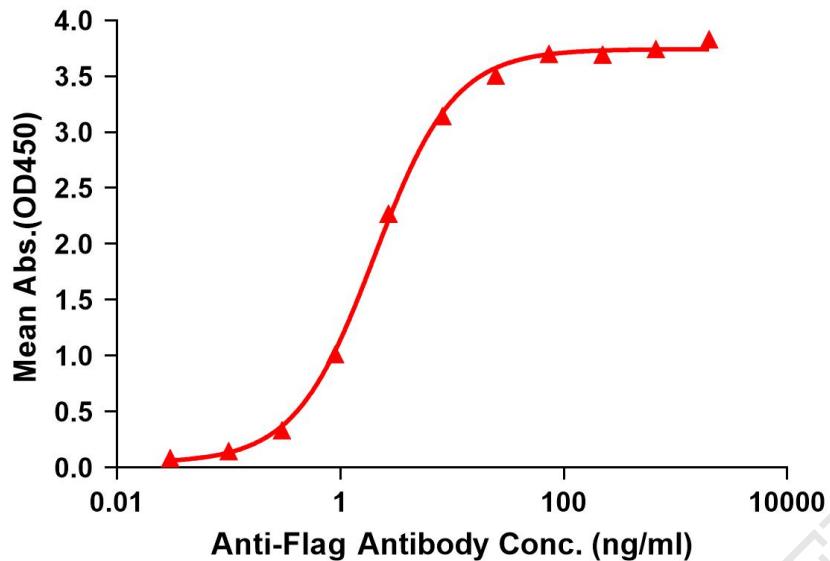


Figure 1. Elisa plates were pre-coated with Flag Tag TRPV1-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TRPV1-Nanodisc is 2.027ng/ml.

kDa M R



Figure 2. WB analysis of Human TRPV1-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution



文献引用

Li, J., Zhou, Z., Wu, Y., Zhao, J., Duan, H., Peng, Y., Wang, X., Fan, Z., Yin, L., Li, M., Liu, F., Yang, Y., Du, L., Li, J., Zhong, H., Hou, W., Zhang, F., Ma, H., & Zhang, X. (2025). Heat acclimation defense against exertional heat stroke by improving the function of preoptic TRPV1 neurons. *Theranostics*, 15(4), 1376-1398. <https://doi.org/10.7150/thno.101422> ([PubMed](#))

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