

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	TSHR
<b>Synonyms</b>	CHNG1; hTSHR-I; LGR3
<b>Description</b>	Human TSHR full length protein-PeptiNanodisc
<b>Uniprot ID</b>	P16473
<b>Protein Families</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways</b>	Autoimmune thyroid disease, Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length TSHR protein has a MW of 86.8 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
<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>	The protein is a membrane protein and a major controller of thyroid cell metabolism. The encoded protein is a receptor for thyrotropin and thyrostimulin, and its activity is mediated by adenylate cyclase. Defects in this gene are a cause of several types of hyperthyroidism.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate TSHR-PeptiNanodisc 0.2 $\mu$ g Human TSHR-PeptiNanodisc per well

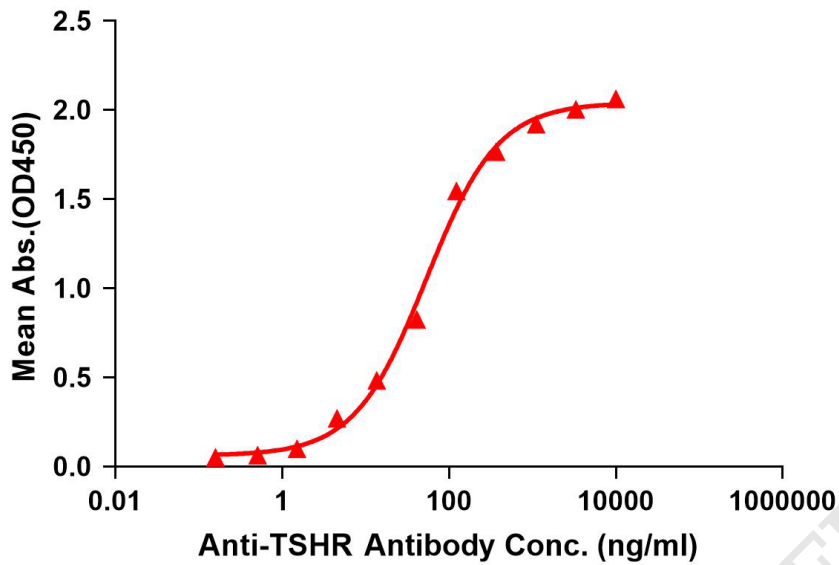


Figure 1. Elisa plates were added with Flag Tag TSHR-peptiNanodisc (0.2 $\mu$ g/per well) on an anti-Flag monoclonal antibody pre-coated (0.2 $\mu$ g/per well) plate. Serial diluted anti-TSHR monoclonal antibody (BME100079, M22) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-TSHR monoclonal antibody binding with TSHR-peptiNanodisc is 53.59ng/ml.

kDa M R

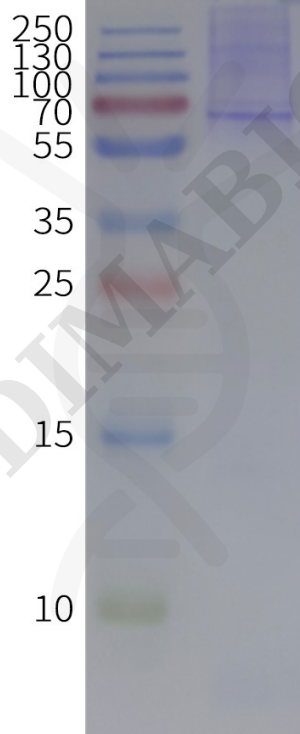


Figure 2. Human TSHR-PeptiNanodisc, Flag Tag on SDS-PAGE

