PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	TSHR
Synonyms	CHNG1; hTSHR-I; LGR3
Description	Human TSHR-Strep full length protein-PeptiNanodisc
Uniprot ID	P16473
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Autoimmune thyroid disease, Neuroactive ligand-receptor interaction
Molecular Weight	The human full length TSHR-Strep protein has a MW of 86.8 kDa
Delivery	In Stock
Formulation & Reconstitution	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
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
Storage&Shipping	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.
Background	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.
Usage	Research use only
Conjugate	Unconjugated

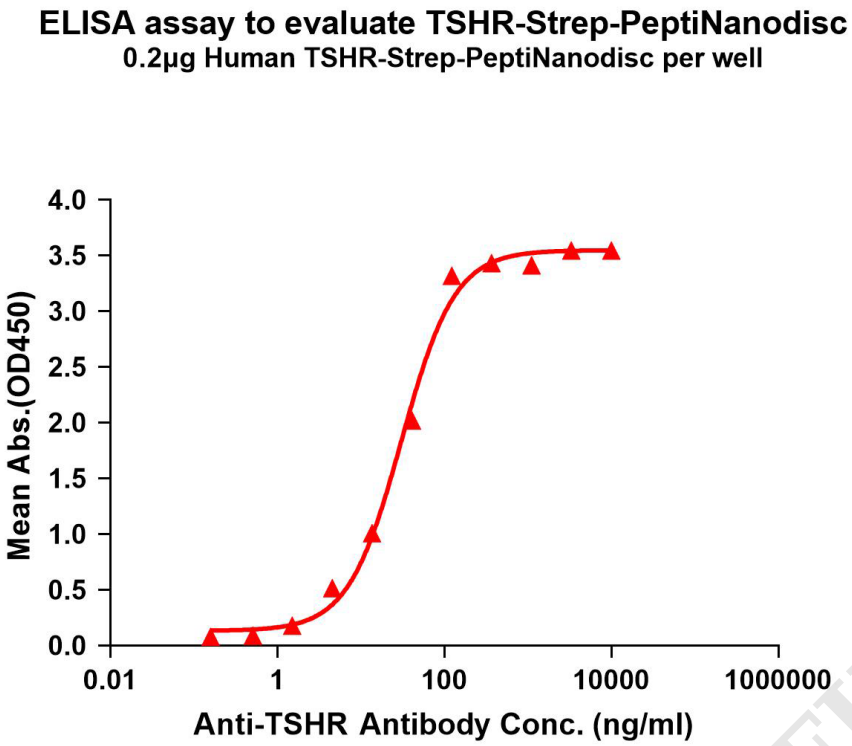

Figure 1. Elisa plates were added with with C-Flag&Strep Tag TSHR-Strep-peptiNanodisc (0.2μg/per well) on an anti-Flag monoclonal antibody pre-coated (0.2μg/per well) plate. Serial diluted anti-TSHR monoclonal antibody (BME100079, M22) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-TSHR monoclonal antibody binding with TSHR-Strep-peptiNanodisc is 30.81ng/ml.

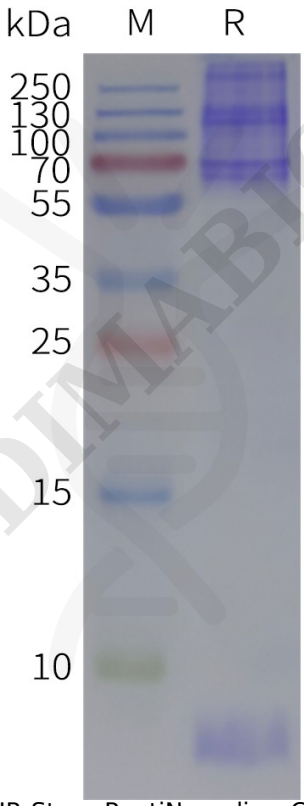

Figure 2. Human TSHR-Strep-PeptiNanodisc, C-Flag&Strep Tag on SDS-PAGE