

## PRODUCT INFORMATION

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| <b>Tag</b>                              | C-Flag Tag   |
| <b>Target</b>                           | TSHR   |
| <b>Synonyms</b>                         | CHNG1; hTSHR-I; LGR3   |
| <b>Description</b>                      | Human TSHR full length protein-synthetic nanodisc  |
| <b>Delivery</b>                         | In Stock   |
| <b>Uniprot ID</b>                       | P16473   |
| <b>Expression Host</b>                  | HEK293   |
| <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>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>                       | 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-Nanodisc**  
0.2 $\mu$ g Human TSHR-Nanodisc per well

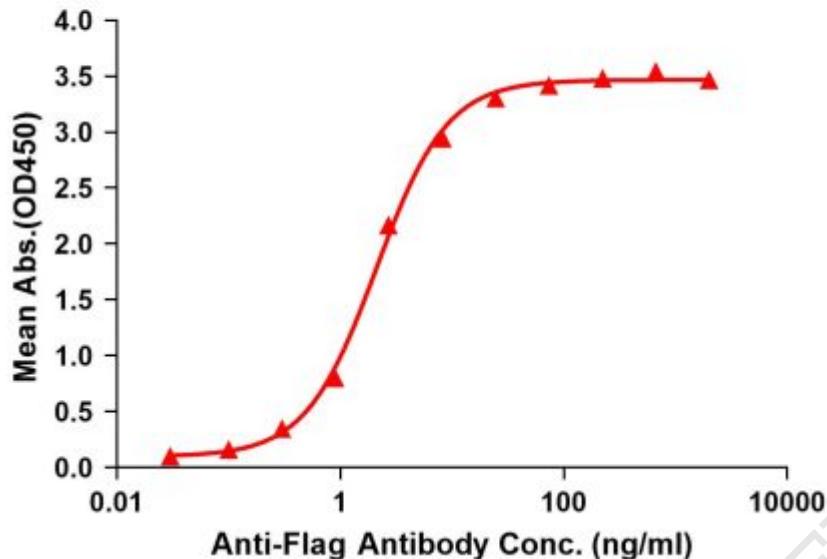


Figure1. Elisa plates were pre-coated with Flag Tag TSHR-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with TSHR-Nanodisc is 2.108ng/ml.

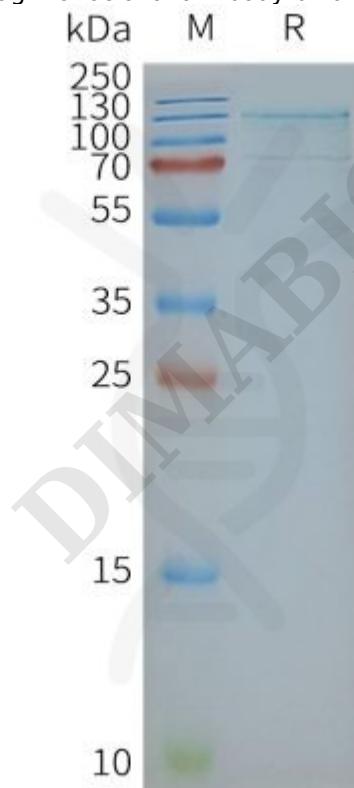


Figure2. Human TSHR-Nanodisc, Flag Tag on SDS-PAGE

