

**PRODUCT INFORMATION**

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|---|---|
| <b>Tag</b>                              | C-Flag&Strep Tag  |
| <b>Target</b>                           | HRH1  |
| <b>Synonyms</b>                         | H1-R; H1R; HH1R; hisH1  |
| <b>Description</b>                      | Human HRH1-Strep full length protein-synthetic nanodisc   |
| <b>Delivery</b>                         | In Stock  |
| <b>Uniprot ID</b>                       | P35367  |
| <b>Expression Host</b>                  | HEK293  |
| <b>Protein Families</b>                 | Druggable Genome, GPCR, Transmembrane   |
| <b>Protein Pathways</b>                 | Calcium signaling pathway, Neuroactive ligand-receptor interaction  |
| <b>Molecular Weight</b>                 | The human full length HRH1-Strep protein has a MW of 55.8 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. 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>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>                       | Histamine is a ubiquitous messenger molecule released from mast cells, enterochromaffin-like cells, and neurons. Its various actions are mediated by histamine receptors H1, H2, H3 and H4. The protein encoded by this gene is an integral membrane protein and belongs to the G protein-coupled receptor superfamily. It mediates the contraction of smooth muscles, the increase in capillary permeability due to contraction of terminal venules, the release of catecholamine from adrenal medulla, and neurotransmission in the central nervous system. It has been associated with multiple processes, including memory and learning, circadian rhythm, and thermoregulation. It is also known to contribute to the pathophysiology of allergic diseases such as atopic dermatitis, asthma, anaphylaxis and allergic rhinitis. |
| <b>Usage</b>                            | Research use only   |
| <b>Conjugate</b>                        | Unconjugated  |



### ELISA assay to evaluate HRH1-Strep-Nanodisc 0.2 $\mu$ g Human HRH1-Strep-Nanodisc per well

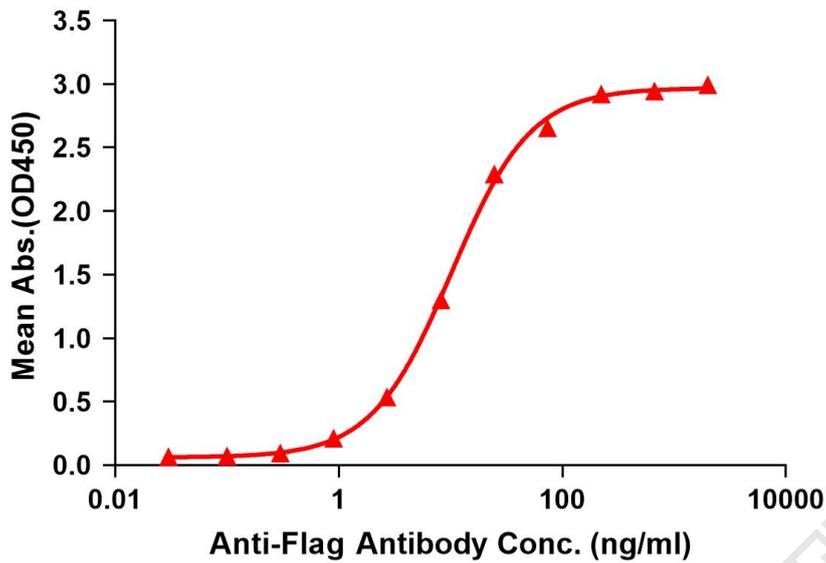


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag HRH1-Strep-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with HRH1-Strep-nanodisc is 10.21ng/ml.

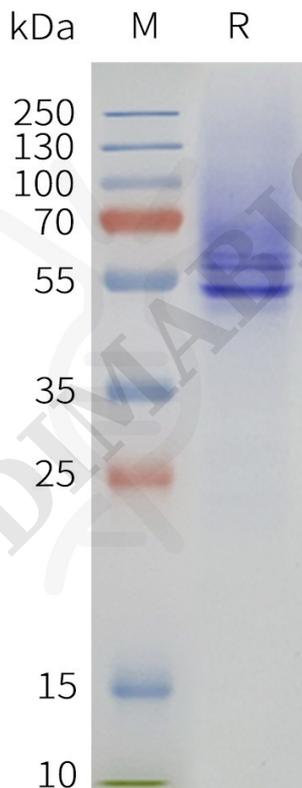


Figure 2. Human HRH1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

