

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	HRH1
Synonyms	H1-R; H1R; HH1R; hisH1
Description	Human HRH1-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	P35367
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Calcium signaling pathway, Neuroactive ligand-receptor interaction
Molecular Weight	The human full length HRH1-Strep protein has a MW of 55.8 kDa
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 specific instructions of reconstitution.
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	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.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate HRH1-Strep-Nanodisc**  
0.2µg Human HRH1-Strep-Nanodisc per well

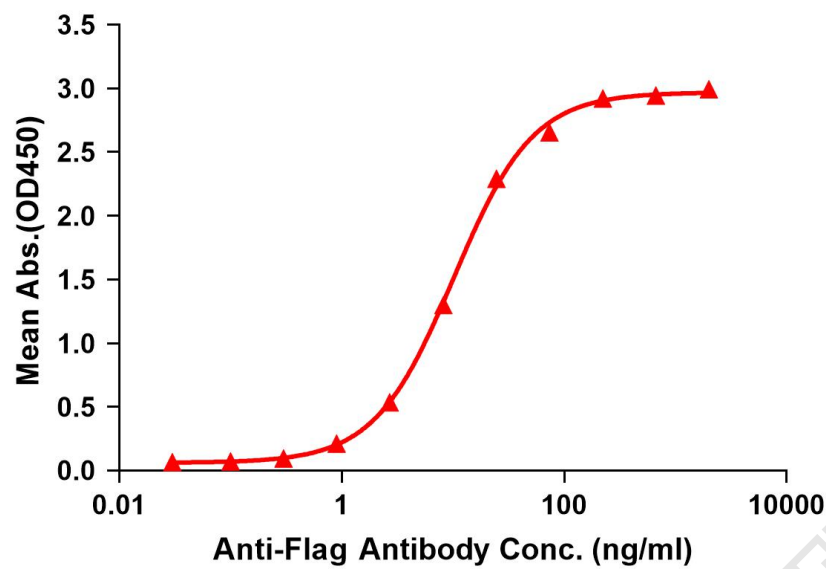


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag HRH1-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding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

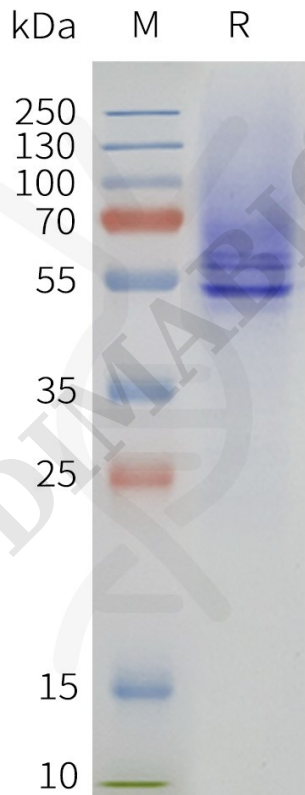


Figure 2. Human HRH1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

