DIMA BIOTECH

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	HCRTR2
Synonyms	ORXR2; OX2R; OXR2
Description	Human HCRTR2-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	O43614
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length HCRTR2-Strep protein has a MW of 50.7 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. 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.
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
Background	A G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein binds the hypothalamic neuropeptides orexin A and orexin B. A related gene (HCRTR1) encodes a G-protein coupled receptor that selectively binds orexin A.
Usage	Research use only
Conjugate	Unconjugated

DIMA BIOTECH

ELISA assay to evaluate HCRTR2-Strep-Nanodisc
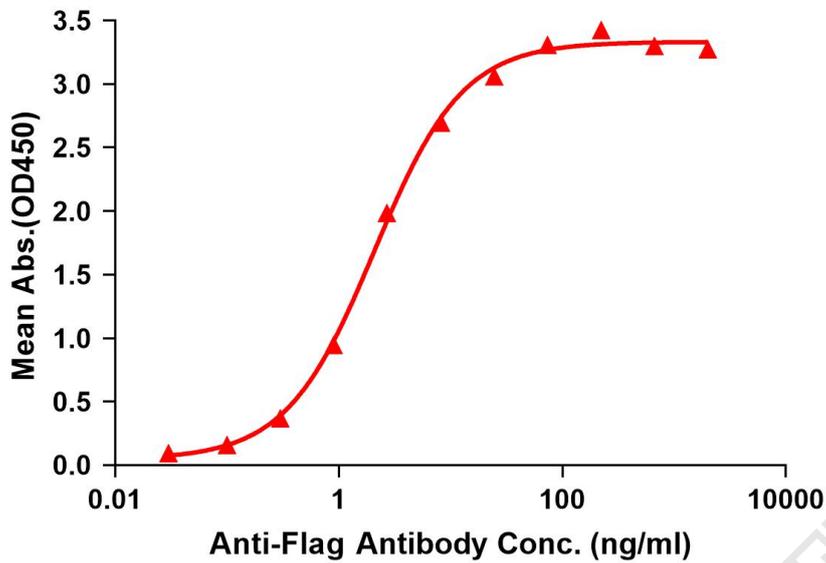**0.2μg Human HCRTR2-Strep-Nanodisc per well**

Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag HCRTR2-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 HCRTR2-Strep-nanodisc is 2.093ng/ml.

Figure 2. Human HCRTR2-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE