

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	MC2R
Synonyms	ACTHR
Description	Human BRIL-MC2R-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q01718
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length MC2R-Strep protein has a MW of 44.8 kDa 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. 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.
Formulation & Reconstitution	One member of the five-member G-protein associated melanocortin receptor family. Melanocortins (melanocyte-stimulating hormones and adrenocorticotropic hormone) are peptides derived from pro-opiomelanocortin (POMC). MC2R is selectively activated by adrenocorticotropic hormone, whereas the other four melanocortin receptors recognize a variety of melanocortin ligands. Mutations in MC2R can result in familial glucocorticoid deficiency. The BRIL sequence was added to the N-terminal of TAAR1 to enhance receptor stability. BRIL is thermostabilized apocytochrome b562 with mutations M7W, H102I, R106L, PDB ID 1M6T.
Storage&Shipping	Research use only
Background	Unconjugated
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate BRIL-MC2R-Strep-Nanodisc
0.2 μ g Human BRIL-MC2R-Strep-Nanodisc per well

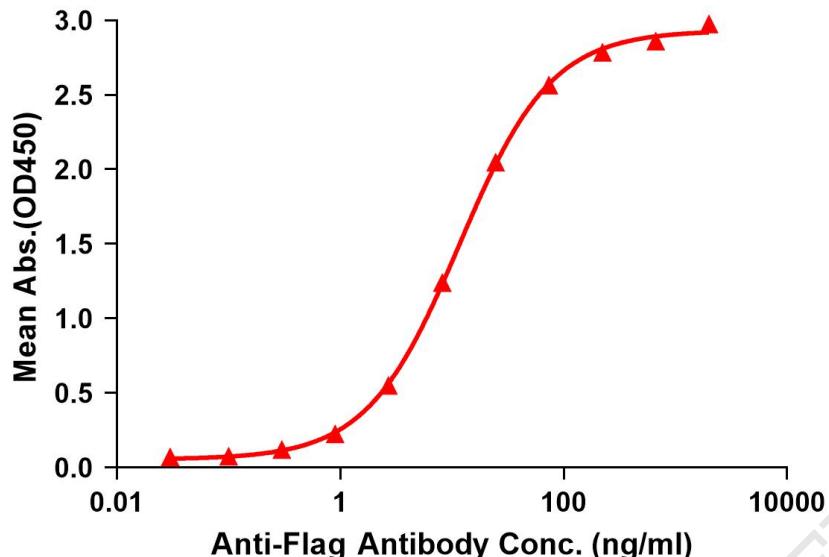


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag BRIL-MC2R-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with BRIL-MC2R-Strep-Nanodisc is 11.63ng/ml.

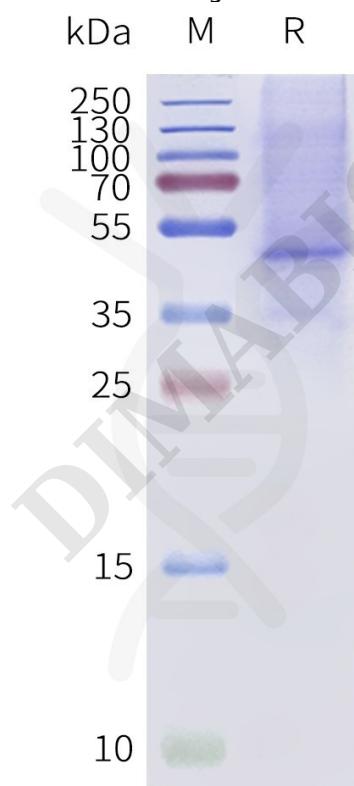


Figure 2. Human BRIL-MC2R-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

