

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag&Strep Tag
<b>Target</b>	MC3R
<b>Synonyms</b>	BMIQ9; MC3; MC3-R; OB20; OQTL
<b>Description</b>	Human MC3R-Strep full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P41968
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways</b>	Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length MC3R-Strep protein has a MW of 36.0 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>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<b>Background</b>	A G-protein-coupled receptor for melanocyte-stimulating hormone and adrenocorticotrophic hormone that is expressed in tissues other than the adrenal cortex and melanocytes. This gene maps to the same region as the locus for benign neonatal epilepsy. Mice deficient for this gene have increased fat mass despite decreased food intake, suggesting a role for this gene product in the regulation of energy homeostasis. Mutations in this gene are associated with a susceptibility to obesity in humans.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate MC3R-Strep-Nanodisc 0.2 $\mu$ g Human MC3R-Strep-Nanodisc per well

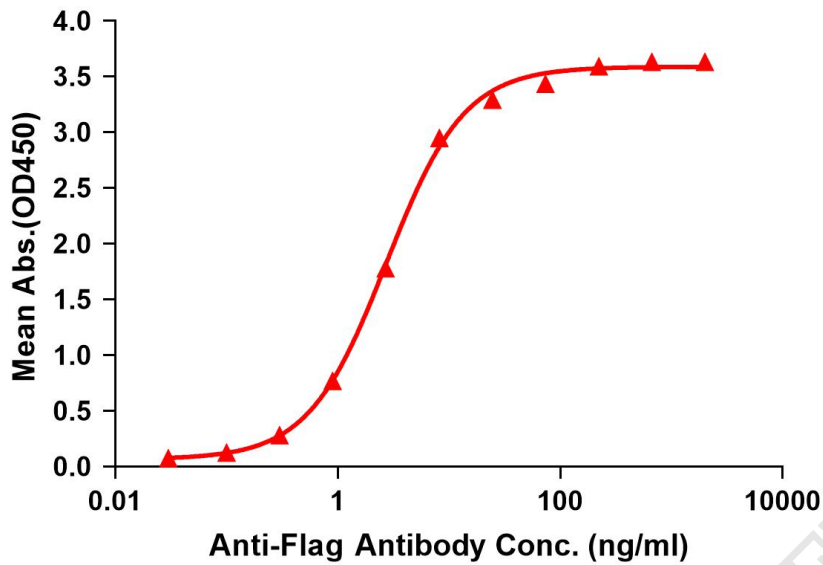


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag MC3R-Strep-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with MC3R-Strep-nanodisc is 2.743ng/ml.

kDa M R

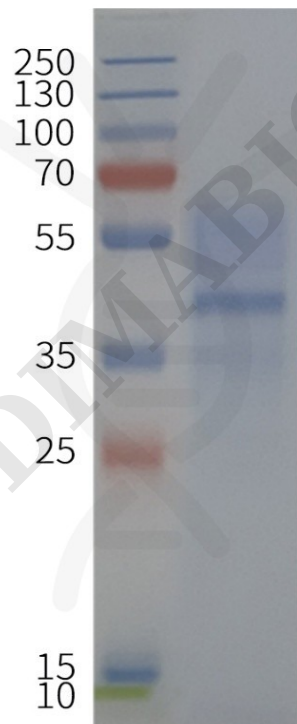


Figure 2. Human MC3R-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

