

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Target</b>	MC4R
<b>Synonyms</b>	BMIQ20
<b>Description</b>	Human MC4R full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P32245
<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 MC4R protein has a MW of 36.9 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>	The protein is a membrane-bound receptor and member of the melanocortin receptor family. The encoded protein interacts with adrenocorticotrophic and MSH hormones and is mediated by G proteins. This is an intronless gene. Defects in this gene are a cause of autosomal dominant obesity.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate MC4R-Nanodisc 0.2 $\mu$ g Human MC4R-Nanodisc per well

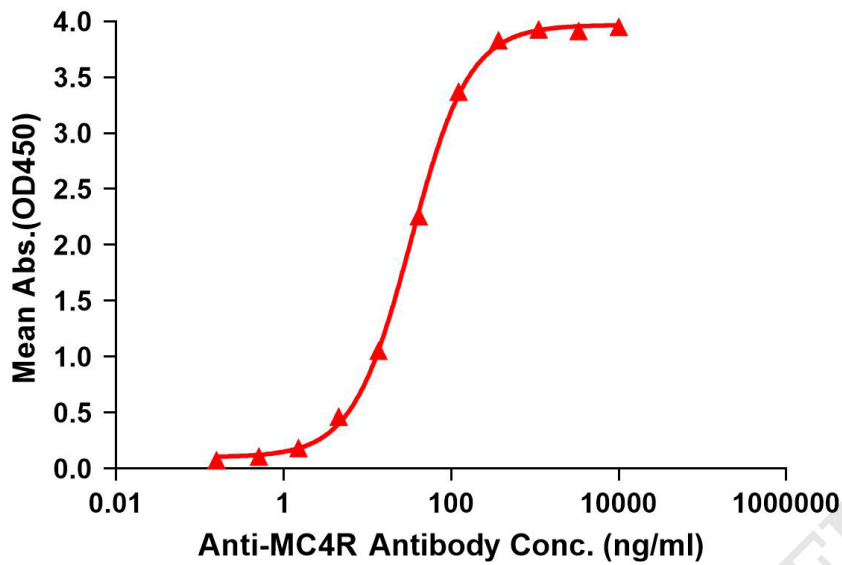


Figure 1. Elisa plates were pre-coated with Flag Tag MC4R-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-MC4R monoclonal antibody (DME101294) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-MC4R monoclonal antibody binding with MC4R-Nanodisc is 33.21ng/ml.

kDa M R



Figure 2. Human MC4R-Nanodisc, Flag Tag on SDS-PAGE

