

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	MTR1A
Synonyms	MEL-1A-R; MT1
Description	Human MTR1A-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	P48039
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length MTR1A-Strep protein has a MW of 39.4 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	One of two high affinity forms of a receptor for melatonin, the primary hormone secreted by the pineal gland. This receptor is a G-protein coupled, 7-transmembrane receptor that is responsible for melatonin effects on mammalian circadian rhythm and reproductive alterations affected by day length. The receptor is an integral membrane protein that is readily detectable and localized to two specific regions of the brain. The hypothalamic suprachiasmatic nucleus appears to be involved in circadian rhythm while the hypophyseal pars tuberalis may be responsible for the reproductive effects of melatonin.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate MTR1A-Strep-Nanodisc**  
0.2µg Human MTR1A-Strep-Nanodisc per well

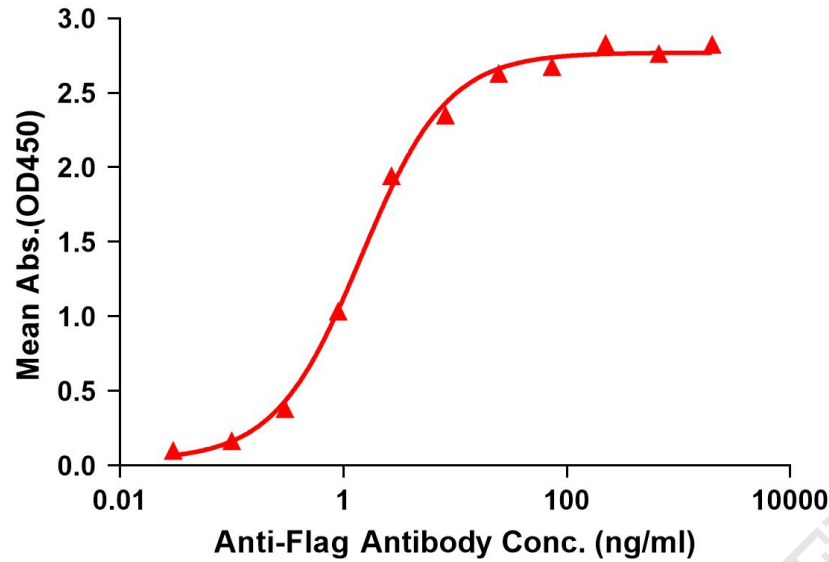


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag MTR1A-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with MTR1A-Strep-nanodisc is 1.451ng/ml.

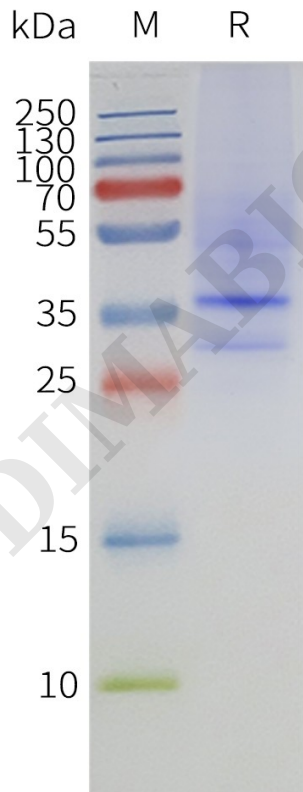


Figure 2. Human MTR1A-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

