

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	OPN3
Synonyms	ECPN; PPP1R116
Description	Human OPN3-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q9H1Y3
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length OPN3-Strep protein has a MW of 44.9 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.
Background	Opsins are members of the guanine nucleotide-binding protein (G protein)-coupled receptor superfamily. In addition to the visual opsins, mammals possess several photoreceptive non-visual opsins that are expressed in extraocular tissues. Opsin 3 is strongly expressed in brain and testis and weakly expressed in liver, placenta, heart, lung, skeletal muscle, kidney, and pancreas. The protein may also be expressed in the retina. The protein has the canonical features of a photoreceptive opsin protein.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate OPN3-Strep-Nanodisc**  
0.2µg Human OPN3-Strep-Nanodisc per well

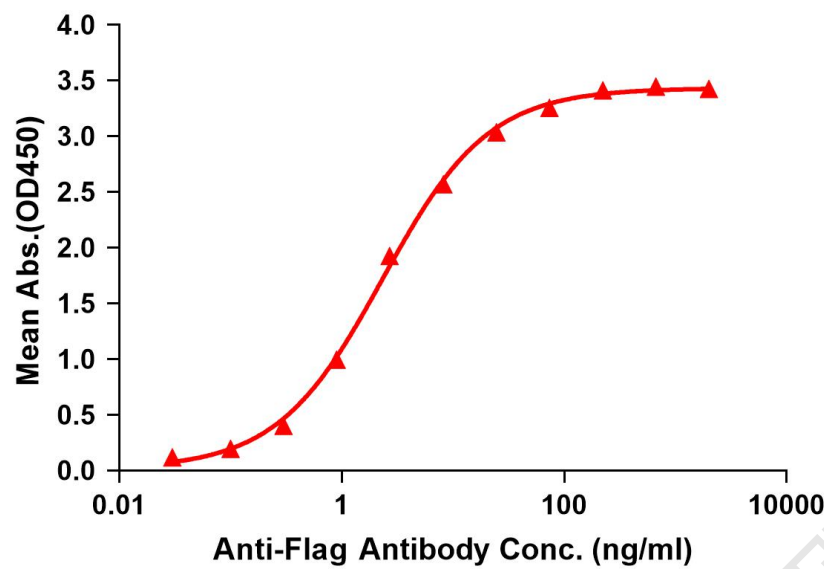


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag OPN3-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with OPN3-Strep-nanodisc is 2.345ng/ml.

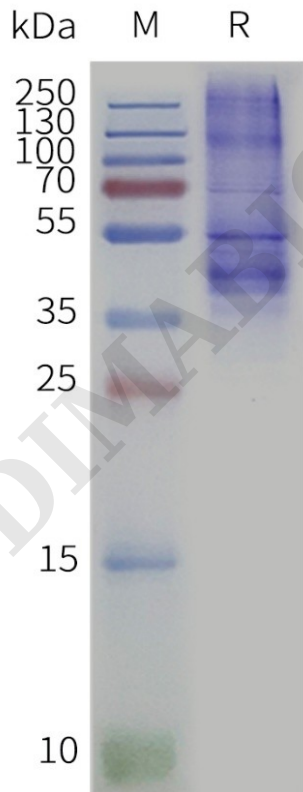


Figure 2. Human OPN3-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

