

PRODUCT INFORMATION

Target	OPN4
Synonyms	MOP
Description	Recombinant human OPN4 Protein with C-terminal human Fc tag
Delivery	In Stock
Uniprot ID	Q9UHM6
Expression Host	HEK293
Tag	C-Human Fc tag
Molecular Characterization	OPN4(Met1-Thr72) hFc(Glu99-Ala330)
Molecular Weight	The protein has a predicted molecular mass of 33.7 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. 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	Opsins are members of the guanine nucleotide-binding protein (G protein)-coupled receptor superfamily. This gene encodes a photoreceptive opsin protein that is expressed within the ganglion and amacrine cell layers of the retina. In mouse, retinal ganglion cell axons expressing this gene projected to the suprachiasmatic nucleus and other brain nuclei involved in circadian photoentrainment. In mouse, this protein is coupled to a transient receptor potential (TRP) ion channel through a G protein signaling pathway and produces a physiologic light response via membrane depolarization and increased intracellular calcium. The protein functions as a sensory photopigment and may also have photoisomerase activity. Experiments with knockout mice indicate that this gene attenuates, but does not abolish, photoentrainment. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Usage	Research use only
Conjugate	Unconjugated



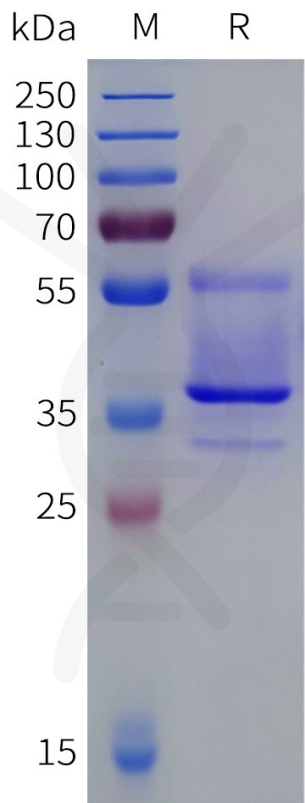


Figure 1. Human OPN4 Protein, hFc Tag on SDS-PAGE under reducing condition.

