

Datasheet for ABIN7596856

## OPN4 Protein (DYKDDDDK Tag, Strep Tag)



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### Overview

Quantity:	10 µg
Target:	OPN4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This OPN4 protein is labelled with DYKDDDDK Tag, Strep Tag.
Application:	ELISA, Surface Plasmon Resonance (SPR), Phage Display (PhD), Immunogen (Imm), Cryogenic electron microscopy (cryo-EM)

### Product Details

Purpose:	Human OPN4-Strep full length protein-synthetic nanodisc
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### Target Details

Target:	OPN4
Alternative Name:	OPN4 ( <a href="#">OPN4 Products</a> )
Background:	<p>MOP</p> <p>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</p>

## Target Details

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]

Molecular Weight: The human full length OPN4-Strep protein has a MW of 52.6 kDa

UniProt: [Q9UHM6](#)

## Application Details

Comment: Advantages:

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane environment and remain biologically active
- No detergent and can be used for cell-based assays
- No MSP backbone proteins
- Mammalian cell expression system ensures post- translational modifications

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Buffer: Solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage: -20 °C,-80 °C

Storage Comment: 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.

Expiry Date: 12 months