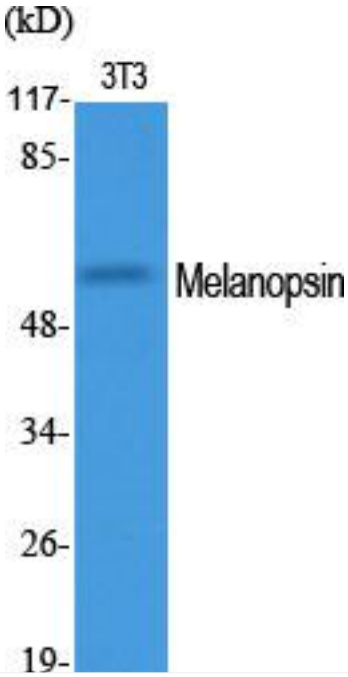
Melanopsin Monoclonal Antibody

Catalog No	YP-mAb-13414
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	OPN4
Protein Name	Melanopsin
Immunogen	The antiserum was produced against synthesized peptide derived from human OPN4. AA range:429-478
Specificity	Melanopsin Monoclonal Antibody detects endogenous levels of Melanopsin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	OPN4; MOP; Melanopsin; Opsin-4
Observed Band	55kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cell projection, axon . Cell projection, dendrite . Perikaryon .
Tissue Specificity	Expressed in the retina.
Function	caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,function:Photoreceptor required for regulation of circadian rhythm. Contributes to pupillar reflex and other non-image forming responses to light. May be able to isomerize covalently bound all-trans retinal back to 11-cis retinal.,similarity:Belongs to the G-protein coupled receptor 1 family.,similarity:Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.,subcellular location:Found in soma, dendrites and proximal part of axons of certain retinal ganglion cells.,tissue specificity:Eye. Expression is restricted within the ganglion and amacrine cell layers of the retina.,
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 Ref
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Melanopsin Monoclonal Antibody