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MTNR1A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9283c

Specification

MTNR1A Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	P48039
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**209-239**

MTNR1A Antibody (Center) - Additional Information

Gene ID 4543

Other Names
Melatonin receptor type 1A, Mel-1A-R, Mel1a receptor, MTNR1A

Target/Specificity
This MTNR1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-239 amino acids from the Central region of human MTNR1A.

Dilution
WB~~1:1000
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MTNR1A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MTNR1A Antibody (Center) - Protein Information

Name MTNR1A

Function High affinity receptor for melatonin. Likely to mediate the reproductive and circadian actions of melatonin. The activity of this receptor is mediated by pertussis toxin sensitive G

proteins that inhibit adenylate cyclase activity. Possibly involved in sleep induction, by melatonin activation of the potassium channel KCNMA1/BK and the dissociation of G-beta and G-gamma subunits, thereby decreasing synaptic transmission (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein.

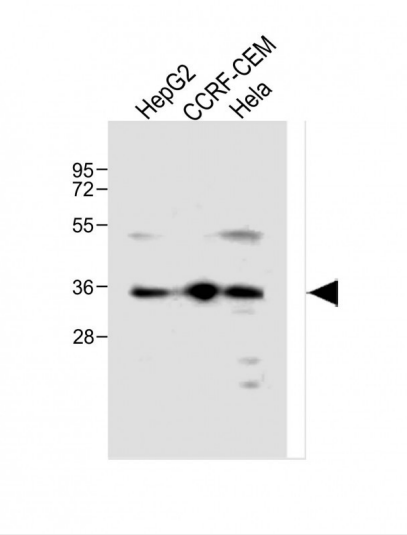
Tissue Location
Expressed in hypophyseal pars tuberalis and hypothalamic suprachiasmatic nuclei (SCN). Hippocampus

MTNR1A Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MTNR1A Antibody (Center) - Images



All lanes : Anti-MTNR1A Antibody (Center) at 1:500 dilution Lane 1: HepG2 whole cell lysate Lane 2: CCRF-CEM whole cell lysate Lane 3: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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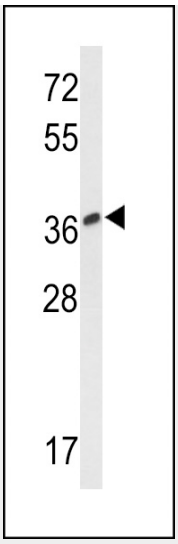
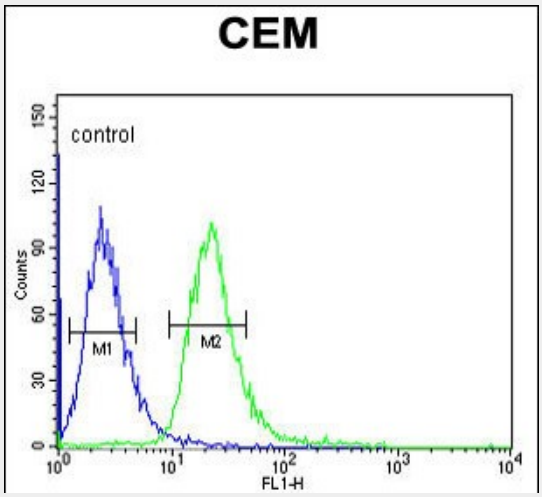


Western blot analysis of MTNR1A Antibody (Center) (Cat. #AP9283c) in CEM cell line lysates (35ug/lane). MTNR1A (arrow) was detected using the purified Pab.



MTNR1A Antibody (Center) (Cat. #AP9283c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MTNR1A Antibody (Center) - Background

MTNR1A encodes 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 hypophysial pars tuberalis may be responsible for the reproductive effects of melatonin.

MTNR1A Antibody (Center) - References

Adi,N., et.al., Med. Sci. Monit. 16 (2), BR61-BR67 (2010)
Hill,S.M., et.al., Integr Cancer Ther 8 (4), 337-346 (2009)
Lai,L., et.al., Breast Cancer Res. Treat. 118 (2), 293-305 (2009)