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Goat Anti-MTNR1A Antibody

Peptide-affinity purified goat antibody
Catalog # AF1693a

Specification

Goat Anti-MTNR1A Antibody - Product Information

Application	**WB, E**
Primary Accession	P48039
Other Accession	NP_005949, 4543
Reactivity	**Human**
Predicted	**Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**39375**

Goat Anti-MTNR1A Antibody - Additional Information

Gene ID 4543

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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-MTNR1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-MTNR1A Antibody - 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

Goat Anti-MTNR1A Antibody - 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

Goat Anti-MTNR1A Antibody - Images

AF1693a (0.3 µg/ml) staining of KELLY lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-MTNR1A Antibody - Background

This gene 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.

Goat Anti-MTNR1A Antibody - References

Analysis of genetic variations in the human melatonin receptor (MTNR1A, MTNR1B) genes and antipsychotics-induced tardive dyskinesia in schizophrenia. Lai IC, et al. World J Biol Psychiatry, 2010 Aug 23. PMID 20726823.
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