

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.

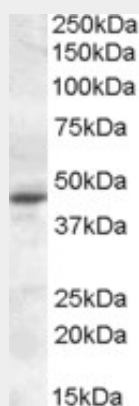
Tissue Location

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 Cytometry](#)
- [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.

Identification of pathway-biased and deleterious melatonin receptor mutants in autism spectrum disorders and in the general population. Chaste P, et al. PLoS One, 2010 Jul 15. PMID 20657642.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Mutation screening of melatonin-related genes in patients with autism spectrum disorders. Jonsson L, et al. BMC Med Genomics, 2010 Apr 8. PMID 20377855.

Melatonin MT1 and MT2 receptor expression in Parkinson's disease. Adi N, et al. Med Sci Monit, 2010 Feb. PMID 20110911.