

Recombinant Human MTNR1A

Cat. No. MTNR1A-30196TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment corresponding to amino acids 296-350 of Human Melatonin Receptor 1A with an N terminal proprietary tag; Predicted MWt 31.68 kDa.
Species	Human
Source	Wheat Germ
ProteinLength	55 amino acids
Description	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.
Molecular Weight	31.680kDa inclusive of tags
Tissue specificity	Expressed in hypophyseal pars tuberalis and hypothalamic suprachiasmatic nuclei (SCN). Hippocampus.
Form	Liquid

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Purity	Proprietary Purification
Storage buffer	pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	GLLNQNF ^R KEY ^R RIIV ^S LCTAR ^V FFVD ^S SNDVADR ^V KWK ^P SPLMTNN ^N VVK ^V D ^S V
Sequence Similarities	Belongs to the G-protein coupled receptor 1 family.

GENE INFORMATION

Gene Name	MTNR1A melatonin receptor 1A [Homo sapiens]
Official Symbol	MTNR1A
Synonyms	MTNR1A; melatonin receptor 1A; melatonin receptor type 1A; MEL 1A R;
Gene ID	4543
mRNA Refseq	NM_005958
Protein Refseq	NP_005949
MIM	600665
Uniprot ID	P48039
Chromosome	4q35

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Location**Pathway**

Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (i) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem; GPCRs, Class A Rhodopsin-like, organism-specific biosystem;

Function

melatonin receptor activity; receptor activity; signal transducer activity;

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