

Product datasheet for PH310385

Melatonin Receptor 1A (MTNR1A) (NM_005958) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	MTNR1A MS Standard C13 and N15-labeled recombinant protein (NP_005949)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210385
Predicted MW:	39.4 kDa
Protein Sequence:	>RC210385 protein sequence Red=Cloning site Green=Tags(s)

MQGNGSALPNASQPVLRGDGRPSWLASALACVLIFTIVVDILGNLLVILSVYRNKCLRAGNIFVVS
VADLVVAIYPYPLVMSIFNNGWNLGYLHCQVSGFLMGLSVIGSIFNITGIAINRYCYICHSLKYDKLYS
SKNSLCYVLLIWLTLAAVLPNLRAGTLQYDPRIYSCTFAQSVSSAYTIAVVVFHFLVPMIIVIFCYLRI
WILVLRVQRVKPDRKPKLKPQDFRNFVTFVVFVLFVFAICWAPLNFVIGLAVASDPASMPRIPEWLFVAS
YYMAYFNSCLNAIYGLLNQFRKEYRRIIVSLCTARVFFVDSSNDVADRVKWKPSPLMTNNNVVKVDSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_005949
RefSeq Size:	1105
RefSeq ORF:	1050
Synonyms:	MEL-1A-R; MT1
Locus ID:	4543



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UniProt ID: [P48039](#)

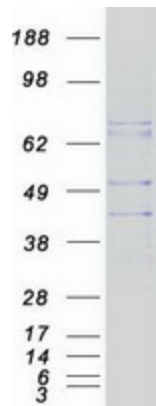
Cytogenetics: 4q35.2

Summary: 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. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

Product images:



Coomassie blue staining of purified MTNR1A protein (Cat# [TP310385]). The protein was produced from HEK293T cells transfected with MTNR1A cDNA clone (Cat# [RC210385]) using MegaTran 2.0 (Cat# [TT210002]).