

Product Information

MemDX™ Membrane Protein Human MTNR1A (Melatonin receptor 1A)

Cat. No.: **MP0025F**

This product is for research use only and is not intended for diagnostic use.

The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

MTNR1A

Protein Length

Full Length

Protein Class

GPCR

Molecular Weight

40 kDa

TMD

7

Sequence

MQNGSALPNASQPVLRGD GARPSWLASALACVLIFTIVVDILGNLLVILSVYRNKKLRN
AGNIFVVSLAVADLVVAIYPYPLVMSIFNNGWNLGYLHCQVSGFLMGLSVIGSIFNITG
IAINRYCYICHSLKYDKLYSSKNSLCYVLLIWLTLAAVLPNLRAGTLQYDPRIYSCTFA
QSVSSAYTIAVVVFHFLVPMIIVIFCYLRIWILVLQVRQVRVKPDRKPKLKPQDFRNFTM
FVVFVLFAICWAPLNFIFGLAVASDPASMVPRIPEWLFVASYMAYFNSCLNAIYGLLNQ
NFRKEYRRIIVSLCTARVFFVDSSNDVADRVKWKPSPLMTNNNVVKVDSV

Product Description

Activity

To be tested

Application

Screening & display technologies

Expression Systems

Cell-free expression system

Tag

Histidine tag fused to the N-terminal end of the protein

Protein Format

Proteoliposome

Form

Powder

Purification

Sucrose gradient

Purity

>50% by SDS-Page and Coomassie Blue staining

Buffer

Tris 50mM, pH 7.5

Storage

Store at +4°C for up to one week or several months at -80°C

Target**Target Protein**

MTNR1A

Full Name

Melatonin receptor 1A

Introduction

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 hypophyseal pars tuberalis may be responsible for the reproductive effects of melatonin.

Alternative Names

MT1, MEL-1A-R

Gene ID

[4543](#)

UniProt ID

[P48039](#)