

## **Product datasheet for RC210385L1**

#### OriGene Technologies, Inc.

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### Melatonin Receptor 1A (MTNR1A) (NM\_005958) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Melatonin Receptor 1A (MTNR1A) (NM\_005958) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Melatonin Receptor 1A

Synonyms: MEL-1A-R; MT1

Mammalian Cell

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

None

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC210385).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_005958

ORF Size: 1050 bp



#### Melatonin Receptor 1A (MTNR1A) (NM\_005958) Human Tagged Lenti ORF Clone - RC210385L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 005958.3</u>

RefSeq Size: 1105 bp
RefSeq ORF: 1053 bp
Locus ID: 4543

 UniProt ID:
 P48039

 Cytogenetics:
 4q35.2

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Neuroactive ligand-receptor interaction

MW: 39.4 kDa

**Gene 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-

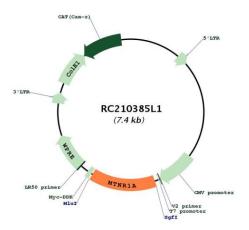
transmembrane receptor that is responsible for melatonin effects on mammalian circadian rhythm and reproductive alterations affected by day length. The receptor is an integral

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.

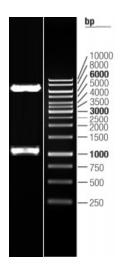
[provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC210385L1



Double digestion of RC210385L1 using Sgfl and Mlul  $\,$