

Product datasheet for RC216445

Melatonin Receptor 1B (MTNR1B) (NM_005959) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Melatonin Receptor 1B (MTNR1B) (NM_005959) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Melatonin Receptor 1B
Synonyms:	FGQTL2; MEL-1B-R; MT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216445 representing NM_005959 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCAGAGAACGGCTCCTTCGCCAACTGCTGCGAGGGCGGGGGTGGGCAGTGCGCCGGGGCTGGTCGG
GGGCTGGCAGCGCGCGGCCCTCCAGGACCCCTCGACCTCCCTGGGTGGCTCCAGCGCTGTCCGGGTGCT
CATCGTCACCACCGCCGTGGACGCTGTGGCAACCTCCTGGTGATCCTCTCCGTGCTCAGGAACCGCAAG
CTCCGGAACGCAGGTAATTTGTTCTTGGTGAGTCTGGCATTGGCTGACCTGGTGGTGGCCTTCTACCCCT
ACCCGCTAATCCTCGTGGCCATTTCTATGACGGCTGGGCCCTGGGGAGGAGCACTGCAAGGCCAGCGC
CTTTGTGATGGGCTGAGCGTCATCGGCTCTGTCTTCAATATCACTGCCATCGCCATTAACCGCTACTGC
TACATCTGCCACAGCATGGCCTACCACCGAATCTACCGGCGCTGGCACACCCCTCTGCACATCTGCCTCA
TCTGGCTCCTCACCGTGGTGGCCTTGTGCCCCAATCTTTGTGGGGTCCCTGGAGTACGACCCACGCAT
CTATTCCTGCACCTTCATCCAGACCGCCAGCACCCAGTACACGGCGGCAGTGGTGGTCACTTCCCTC
CTCCCTATCGTGTGCTGCTTCTGCTACCTGCGCATCTGGGTGCTGGTGTTCAGGCCCGCAGGAAAG
CCAAGCCAGAGAGCAGGCTGTGCCTGAAGCCAGCGACTTGGGGAGCTTCTAACCATGTTTGTGGTGT
TGTGATCTTTGCCATCTGCTGGGCTCACTTAAGTGCATCGGCCCTCGCTGGCCATCAACCCCAAGAA
ATGGCTCCCAGATCCCTGAGGGGCTATTTGCTACTAGCTACTTACTGGCTTATTTCAACAGCTGCCTGA
ATGCCATTGTCTATGGGCTCTTGAACCAAACTTCCGCAGGGAATACAAGAGGATCCTCTTGGCCCTTTG
GAACCCACGCGCACTGCATTCAAGATGCTTCCAAGGCGAGCCACGCGGAGGGGCTGCAGAGCCAGCTCCA
CCCATCATTGGTGTGCAGCACCGGAGATGCTCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC216445 representing NM_005959
Red=Cloning site Green=Tags(s)

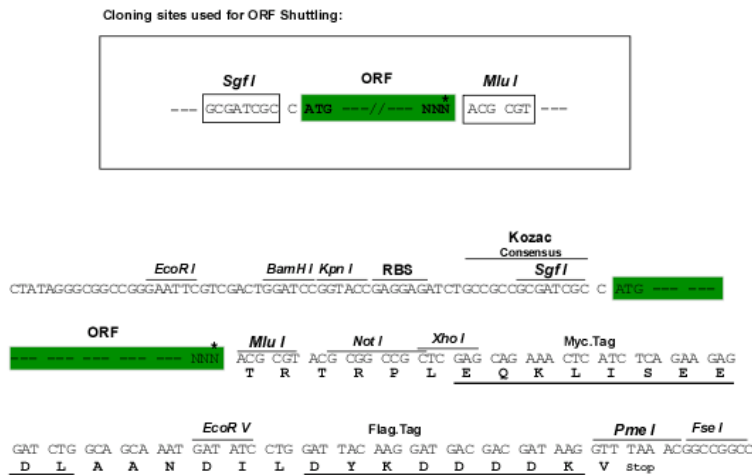
MSENGSFANCCEAGGWAVRPGWVGAGSARPSRTPRPPWVAPALSAVLIVTTAVDVVGNLLVILSVLRNRK
 LRNAGNLFVSLALADLVVAFYPYPLILVAIFYDGWALGEEHCKASAFVMGLSVIGSVFNITAIAINRYC
 YICHSMAYHRIYRRWHTPLHICLIWLLTVVALLPNFFVGSLEYDPRIYSCTFIQTASTQYTAAVVVIHFL
 LPIAVVSFCYLRIWVVLQARRKAKPESRLCLKPSDLRSFLTMFVVVFVIFAICWAPLNCIGLAVAINPQE
 MAPQIPEGLFVTSYLLAYFNLSCLNAIVYGLLNQNFRRREYKRILLALWNP RHCIQDASKGSHAEG LQSPAP
 PIIGVQH QADAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6117_b08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_005959

ORF Size: 1086 bp

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: [NM_005959.5](#)

RefSeq Size: 1662 bp

RefSeq ORF: 1089 bp

Locus ID: 4544

UniProt ID: [P49286](#)

Cytogenetics: 11q14.3

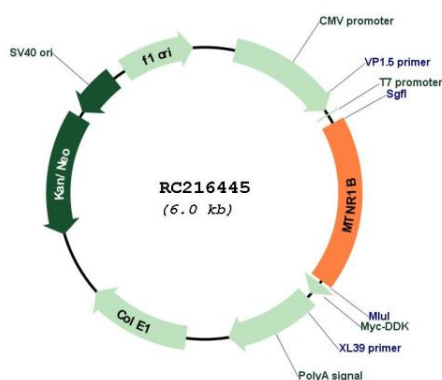
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

MW: 40 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 gene product is an integral membrane protein that is a G-protein coupled, 7-transmembrane receptor. It is found primarily in the retina and brain although this detection requires RT-PCR. It is thought to participate in light-dependent functions in the retina and may be involved in the neurobiological effects of melatonin. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC216445