

## Product datasheet for **SC116399**

### Melatonin Receptor 1A (MTNR1A) (NM\_005958) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Melatonin Receptor 1A (MTNR1A) (NM_005958) Human Untagged Clone
Tag:	Tag Free
Symbol:	MTNR1A
Synonyms:	MEL-1A-R; MT1
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene sequence for NM_005958, RT-PCR generated

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ATGCAGGGCAACGCGCAGCGCTGCCAACGCCTCCAGCCGTGCTCCGCGGGACGGC
GCGCGGCCCTCGTGGCTGGCGTCCGCCCTGGCCTGCGTCCTCATCTTACCATCGTGGT
GACATCCTGGGCAACCTCCTGGTCATCCTGTCGGTGTATCGGAACAAGAAGCTCAGGAAC
GCAGGAAACATCTTTGGTGGAGCTTAGCGGTGGCAGACCTGGTGGTGGCCATTTATCCG
TACCCGTTGGTGTGATGTCGATATTTAAACAACGGGTGGAACCTGGGCTATCTGCACTGC
CAAGTCAGTGGGTTCTGATGGGCCTGAGCGTCATCGGCTCCATATTCAACATCACGGC
ATCGCCATCAACCGCTACTGCTACATCTGCCACAGTCTCAAGTACGACAAACTGTACAGC
AGCAAGAACTCCCTCTGCTACGTGCTCCTCATATGGCTCCTGACGCTGGCGGCCGTCCTG
CCCAACCTCCGTGACGGGACTCTCCAGTACGACCCGAGGATCTACTCGTGACCTTCGCC
CAGTCCGTGAGCTCCGCCTACACCATCGCCGTGGTGGTTTTCCACTTCCTCGTCCCATG
ATCATAGTCATCTTCTGTACCTGAGAATATGGATCCTGGTTCTCCAGGTGAGACAGAGG
GTGAAACCTGACCCGAAACCCAACTGAAACCACAGGACTTCAGGAATTTGTCACCATG
TTTGTGGTTTTTGTCTTTTTGCCATTTGCTGGGCTCCTCTGAATTCATTGGCCTGGCC
GTGGCCTCTGACCCGCCAGCATGGTGCCTAGGATCCCAGAGTGGCTGTTTGTGGCCAGT
TACTACATGGCGTATTTCAACAGCTGCTTCAATGCCATTATATACGGGCTACTGAACAA
AATTTTCAGGAAGGAATACAGGAGAATTATAGTCTCGCTGTACAGCCAGGGTGTCTTT
GTGGACAGCTCTAACGACGTGGCCGATAGGGTTAAATGGAAACCGTCTCCACTGATGACC
AACAAATAGTAGTAAAGGTGGACTCCGTTTAA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_005958 unedited GGCCGAGGTCAAGATTTTGTATACGACTCACTATAGGGCGGCCGCCAGTGTGATGGAATC TGCAGAATTCGGCTTGACGCGAACAGGGACCATGCAGGGCAACGGCAGCGCGCTGCCAA CGCCTCCCAGCCCGTGTCCGCGGGGACGGCGCGGCCCTCGTGGTGGCGTCCGCCCT GGCCTGCGTCCTCATCTTACCATCGTGGTGGACATCCTGGGCAACCTCCTGGTCATCCT GTCGGTGTATCGGAACAAGAAGCTCAGGAACGCAGGAAACATCTTTGTGGTGAGCTTAGC GGTGGCAGACCTGGTGGTGGCCATTTATCCGTACCCGTTGGTGGTGTGATGTCGATATTTAA CAACGGGTGGAACCTGGGCTATCTGCACTGCCAAGTCAGTGGGTTCTGATGGGCCTGAG CGTCATCGGCTCCATATTCAACATCACCCGCATCGCCATCAACCGCTACTGCTACATCTG CCACAGTCTCAAGTACGACAAACTGTACAGCAGCAAGAACTCCCTCTGCTACGTGCTCCT CATATGGCTCCTGACGCTGGCGGCCGCTCTGCCAACCTCCGTGCAGGGACTCTCCAGTA CGACCCGAGGATCTACTCGTGCACCTTCGCCAGTCCGTGAGCTCCGCTACACCATCGC CGTGGGTGGTTTTCCACTTCTCGTCCCATGATCATAGTCATCTTCTGTACCTGAGAA TATGGATCCTGGTCTCCAGTCCAGGTCAGACAGAGGGTCAAACCTGACCGCANACCCAACTGA NACCACAGGACTTCAGGAATTTTGTCCCATGTTTGTGGGTTTTGTCTTTTTGCCATTT GCTGGGCTCCTCTGAACCTATTGCCTGGCCGTGGCCTCTGACCCCGCAGCATGTGCCCT AGATCCCAGATGGCN
<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_005958 unedited GGGGACTAGGAATGGAACCTCCATGCCAGNAAAGCACTGGGGNAGGGTCACAGGGCTGC CACCCGGGATCTGTTTACGAAACAGCTATGACCGCGGCCCAATCTAGAGTCGACAAGCT TGATATCGGTACCGAGCTCGGATCCACTAGTAACGGCCGCCAGTGTGCTGGAATTCGGCT TTTAAACGGAGTCCACCTTTACTACATTATTGTTGGTCATCAGTGGAGACGGTTTTCCATT TAACCCTATCGGCCACGTGTTAGAGCTGTCCACAAAGAACCCCTGGCTGTACAGAGCG AGACTATAATTCTCCTGTATTCTTCTGAAATTTTGGTTCAGTAGCCCGTATATAATGG CATTGAAGCAGCTGTTGAAATACGCCATGTAGTAAGTGGCCACAACAGCCACTCTGGGA TCCTAGGCACCATGCTGGCGGGGTGAGAGCCACGGCCAGGCCAATGAAGTTCAGAGGAG CCCAGCAAATGGCAAAAAGGACAAAACCAAAACATGGTGACCAAATTCCTGAAGTCTCT GTGGTTTTAGTTTTGGGTTTGGCGTCAAGTTTTACCCTCTGTCTGACCTGGAGAACCAGGA TCCATATTCTCAGGTAACAAGAGATGACTATGATCATGGGGACGAGGAAGTGGAAAACCA CCCCCGGATGGTGAAGCGGACCTGACNGACTGGGCGAAAGTGCACAAATAAATCCTCGG GTCCGACTGGGAGAGTCCCTGCACGGGAGGTTGGGCCAGGACGGCCCGCCACCCTCAGGA GCCCTTATGAAGAGCACGTACCAAAAAGGAGTTCCTTGTGCTGGCAAGTTTTGGTGCAGT TGAAAATGGGGCAAAGTATAAATAGCGGG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_005958
<b>Insert Size:</b>	1300 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>RefSeq:</b>	<a href="#">NM_005958.3</a> , <a href="#">NP_005949.1</a>
<b>RefSeq Size:</b>	1105 bp
<b>RefSeq ORF:</b>	1053 bp
<b>Locus ID:</b>	4543
<b>UniProt ID:</b>	<a href="#">P48039</a>

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

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

**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]