

Product datasheet for **RG217839**

Melatonin Related Receptor (GPR50) (NM_004224) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Melatonin Related Receptor (GPR50) (NM_004224) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Melatonin Related Receptor
Synonyms:	H9; Mel1c
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG217839 representing NM_004224
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGGCCACCCTAGCGGTTCCACCCTATGGCTGTATTGGCTGTAAGCTACCCAGCCAGAATACC
 CACCGGCTCTAATCATCTTTATGTTCTGCGGATGGTTATCACCATCGTTGTAGACCTAATCGGCAACTC
 CATGGTCAATTTGGCTGTGACGAAGAACAAGAAGCTCCGGAATTCGGCAACATCTTCGTTGAGTCTC
 TCTGTGGCCGATATGCTGGTGGCCATCTACCCATACCCCTTGTGCTGCATGCCATGTCCATTGGGGCT
 GGGATCTGAGCCAGTTACAGTGCAGATGGTGGGTTTCACAGGGCTGAGTGTGGTGGCTCCATCTT
 CAACATCGTGGCAATCGCTATCAACCGTACTGCTACATCTGCCACAGCTCCAGTACGAACGGATCTT
 AGTGTGCGCAATACCTGCATCTACCTGGTATCACCTGGATCATGACCGTCTGGCTGCCTGCCAACA
 TGTACATTGGCACCATCGAGTACGATCCTCGCACCTACACCTGCATCTTCAACTATCTGAACAACCTGT
 CTTCACTGTTACCATCGTCTGCATCCACTTCGCTCCTCCTCCTCATCGTGGGTTTCTGCTACGTGAGG
 ATCTGGACCAAAGTGCTGGCGGCCGCTGACCCTGCAGGGCAGAATCCTGACAACCAACTGCTGAGGTT
 GCAATTTTCTAACCATGTTTGTGATCTTCTCCTCTTTCAGTGTGCTGGTGCCTATCAACGTGCTCAC
 TGTCTTGGTGGCTGTGAGTCCGAAGGAGATGGCAGGCAAGATCCCAACTGGCTTATCTTGACGCTAC
 TTCATAGCCTACTTCAACAGTGCCTCAACGCTGTGATCTACGGGCTCCTCAATGAGAATTTCCGAAGAG
 AACTGGACCATCTCCATGCTATGCGGCACCCTATCATATTCTTCTGCGCTCATCAGTGATATTCCG
 TGAGATGCAGGAGGCCGTACCTGGCCCGCGCCGTCGCCATGCTCGGACCAAGCTCGTGAACAAGAC
 CGTGCCCATGCCTGTCTGTGTGGAGGAAACCCGATGAATGTCGGAATGTTCCATTACCTGGTGATG
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 GCCTTCAGTGTGCCACCAGCCACCCTAAACCCACCCTGGCCACATCAAGCCAGTACCAGCCATGCTG
 AGCCACCCTGCTGACTATCCCAAGCCTGCCACTACCAGCCACCCTAAGCCACTGCTGCTGACAACCC
 TGAGTCTCTGCCTCCATTGCCCGAGATCCCTGCCATTGCCACCCTGTGTCTGACGACAGTGACCTC
 CCTGAGTCGGCTTAGCCCTGCCGCTGGGCCACCAAGCCTGCTGCCAGCCAGTGGAGTCTGACACCA
 TCGCTGACCTTCTGACCTACTGTAGTCACTACCAGTACCAATGATTACCATGATGTCGTGTTATTGA
 TGTGAAGATGATCCTGATGAAATGGCTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

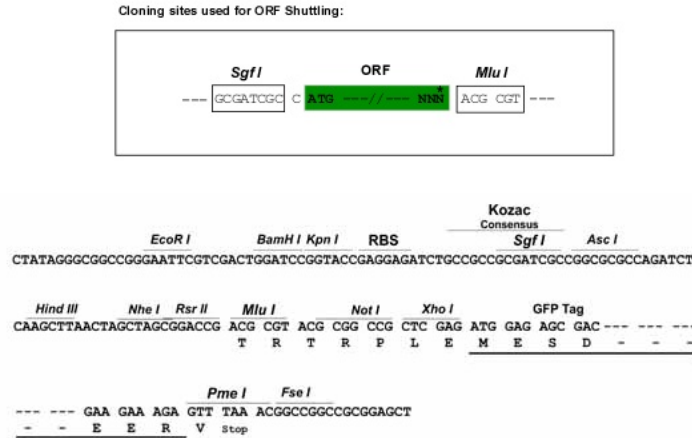
>RG217839 representing NM_004224
 Red=Cloning site Green=Tags(s)

MGPTLAVPTPYGICGCKLPQPEYPPALIIIFMFCAMVITIVVDLIGNSMVILAVTKNKKLRNSGNIFVVS
 LSVADMLVAIYPYPLMLHAMSIGGWLSQLQCQMVGFITGLSVVGSIFNIVAIAINRYCYICHSLQYERIF
 SVRNTCIYLVITWIMTVLAVLPNMYIGTIEYDPRTYTCIFNYLNNPVFTVTIVCIHFVPLLLIVGFCYVR
 IWTKVLAAARDPAGQNPQNQLAEVRNFLTMTFVIFLLFAVCWCPINLTVLVAVSPKEMAGKIPNWL YLAAY
 FIAFYNSCLNAVIYGLLNENFRREYWTIFHAMRHPIIFFSGLISDIEMQEARTLARARAHARDQAREQD
 RAHACPAVEETPMNVRNVPLPGDAAAGHPDRASGHPKPHSRSSAYRKSASTHHKSVF SHSKAASGHLKP
 VSGHSPASGHPKSATVYPKASVHFKADSVHFKGDSVHFKPDSVHFKPASSNPKPITGHHVSAGSHSKS
 AFSAATSHPKPTTGHIPATSHAETPTADYPKPATTSHPKPTAADNPELSASHCPAIPAIHPVSDSDSL
 PESASSPAAGPTKPAASQLESDTIADLPDPTVVTTSTNDYHDVVVIDVEDDPDEMAV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_004224

ORF Size: 1851 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

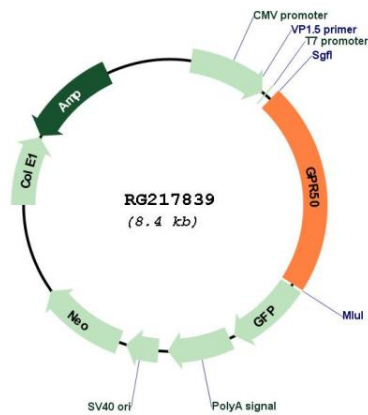
Reconstitution Method:

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_004224.3](#)

RefSeq Size:	2010 bp
RefSeq ORF:	1854 bp
Locus ID:	9248
UniProt ID:	Q13585
Cytogenetics:	Xq28
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
Gene Summary:	This gene product belongs to the G-protein coupled receptor 1 family. Even though this protein shares similarity with the melatonin receptors, it does not bind melatonin, however, it inhibits melatonin receptor 1A function through heterodimerization. Polymorphic variants of this gene have been associated with bipolar affective disorder in women. [provided by RefSeq, Jan 2010]

Product images:



Circular map for RG217839