

Product datasheet for **RG209364**

HTR2B (NM_000867) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HTR2B (NM_000867) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HTR2B
Synonyms:	5-HT(2B); 5-HT-2B; 5-HT2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG209364 representing NM_000867
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCTCTTACAGAGTGTCTGAACCTCAAAGCACAAATTCCTGAGCACATTTTGAGAGCACCTTTG
 TTCACGTTATCTTCTAACTGGTCTGGATTACAGACAGAATCAATACCAGAGGAAATGAAACAGATTGT
 TGAGGAACAGGAAATAAACTGCACTGGCAGCTCTTCTGATACTCATGGTGATAATACCACAATTGGT
 GAAATACCCTTGTATTCTGGCTGTTTACTGGAGAAGAAGCTGCAGTATGCTACTAATTACTTTCTAA
 TGTCTTGGCGTGGCTGATTTGCTGGTTGGATTGTTTGTGATGCCAATGCCCTTTGACAATAATGTT
 TGAGGCTATGTGGCCCTCCCACTTGTCTATGTCCTGCCTGGTATTTCTTGACGTTCTTTTTCAACC
 GCATCCATCATGCATCTGTGCCATTTCACTGGATCGTTACATAGCCATCAAAAAGCCAATCCAGGCCA
 ATCAATAAACTACGGGCTACAGCATTCAAGATTACAGTGGTGTGGTTAATTTCAATAGGCATTGC
 CATTCCAGTCCCTATTAAGGGATAGAGACTGATGTGGACAACCCAAACAATCACTTGTGTGCTGACA
 AAGGAACGTTTTGGCGATTTATGCTCTTTGGCTCACTGGCTGCCTTCTCACACCTCTTCAATTATGA
 TTGTCACCTACTTTCTCACTATCCATGCTTTACAGAAGAAGGCTTACTTAGTCAAAAACAAGCCACCTCA
 ACGCTAACATGGTTGACTGTGTCTACAGTTTTCAAAGGGATGAAACACCTTGCTCGTACCCGAAAAG
 GTGGCAATGCTGGATGGTTCTCGAAAGGACAAGGCTCTGCCCACTCAGGTGATGAAACACTTATGCGAA
 GAACATCCACAATTGGGAAAAAGTCAGTGCAGACCATTTCAAACGACAGAGAGCCTCAAAGTCTTAGG
 GATTGTGTTTTCTCTTTTGTATGTGGTGTCCCTCTTTATTACAAATAAACTTTAGTTTTATGT
 GATTCTGTAACCAAACTACTCTCAAAATGCTCCTGGAGATTTGTGTGGATAGGCTATGTTTCTCAG
 GAGTGAATCCTTTGGTCTACACCCTTCAATAAGACATTTCCGGATGCATTTGGCCGATATACACCTG
 CAATTACCGGGCCAAAAGTCAGTAAAACTCTCAGAAAACGCTCCAGTAAGATCACTTCCGGAATCCA
 ATGGCAGAGAACTCTAAGTTTTTCAAGAAACATGGAATTCGAAATGGGATTAACCTGCCATGTACCAGA
 GTCCAATGAGGCTCCGAAGTTCAACCATTCACTTCAATCATTCTACTAGATACGCTTCTCTCTCAC
 TGAATAAGAGGTGACAAAACCTGAAGAGCGAGTTAGTTATGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG209364 representing NM_000867
 Red=Cloning site Green=Tags(s)

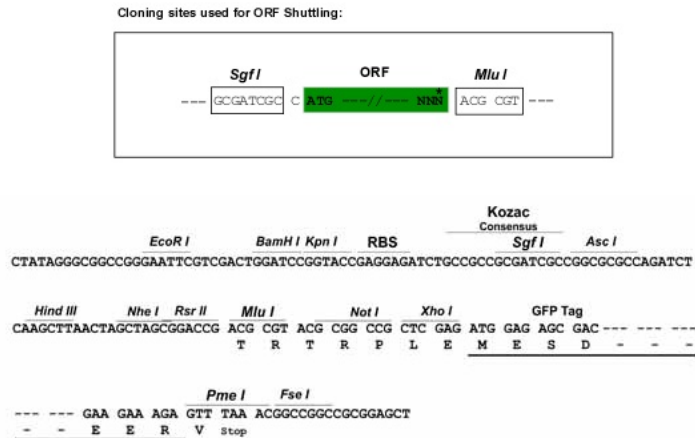
MALSYRVSELQSTIPEHILQSTFVHVISSNWSGLQTESIPEEMKQIVVEEQGNKLHWAALLILMVIPTIG
 GNTLVILAVSLEKKLQYATNYFLMSLAVADLLVGLFVMPIALLTIMFEAMWPLPLVLCPAWLFLDVLVST
 ASIMHLCAISVDRYIAIKKPIQANQYNSRATAFIKITVVWLISIGIAIPVPIKGIETDVDNPNNITCVLT
 KERFGDFMLFGSLAAFFTPLAIMIVTYFLTIHALQKKAYLVKNKPPQRLTWLTVSTVFQRDETCCSPEK
 VAMLDGSRKDKALPNSGDETLMRRTSTIGKKSQVTISNEQRASKVLGIVFFLLMWCFFITNITLVLC
 DSCNQTTLQMLLEIFVWIGYVSSGVNPLVYTLFNKTFRDAFGRYITCNYRATKSVKTLRKRSSKIYFRNP
 MAENSKFFKKGIRNGINPAMYQSPMLRSSTIQSSSIILLDTLLL TENEGDKTEERSVY

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000867

ORF Size: 1443 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_000867.3](#)

RefSeq Size: 2260 bp

RefSeq ORF: 1446 bp

Locus ID: 3357

UniProt ID: [P41595](#)

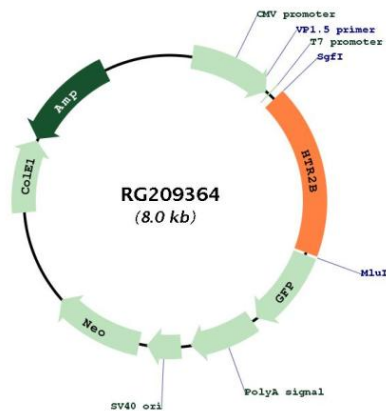
Cytogenetics: 2q37.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Calcium signaling pathway, Gap junction, Neuroactive ligand-receptor interaction

Gene Summary: This gene encodes one of the several different receptors for 5-hydroxytryptamine (serotonin) that belongs to the G-protein coupled receptor 1 family. Serotonin is a biogenic hormone that functions as a neurotransmitter, a hormone, and a mitogen. Serotonin receptors mediate many of the central and peripheral physiologic functions of serotonin, including regulation of cardiovascular functions and impulsive behavior. Population and family-based analyses of a minor allele (glutamine-to-stop substitution, designated Q20*) which blocks expression of this protein, and knockout studies in mice, suggest a role for this gene in impulsivity. However, other factors, such as elevated testosterone levels, may also be involved. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RG209364