

Product datasheet for **RG210182**

5 HT 2A (HTR2A) (NM_000621) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	5 HT 2A (HTR2A) (NM_000621) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	5 HT 2A
Synonyms:	5-HT2A; HTR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG210182 representing NM_000621
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGATATTCTTTGTGAAGAAAATACTTCTTTGAGCTCAACTACGAACTCCCTAATGCAATTAATGATG
 ACCAGGCTCTACAGTAATGACTTTAACTCCGGAGAAGCTAACACTTCTGATGCATTTAACTGGACAGT
 CCACTCTGAAAATCGAACCAACCTTTCTGTGAAGGGTGCCTCTCACCGTCGTGTCTCTCCTTACTTCAT
 CTCAGGAAAAAACTGGTCTGCTTTACTGACAGCCGTAGTGATTATTCTAACTATTGCTGGAAACATAC
 TCGTCATCATGGCAGTGTCCCTAGAGAAAAAGCTGCAGAATGCCACCAACTATTTCTGATGTCACTTGC
 CATAGCTGATGCTGCTGGTTTCTTGTGCATGCCCGTGTCCATGTTAACCATCCTGTATGGGTACCGG
 TGGCTCTGCCGAGCAAGCTTTGTGCAGTCTGGATTTACCTGGACGTGCTTTCTCCACGGCTCCATCA
 TGCACCTCTGCGCATCTCGCTGGACCGCTACGTCGCCATCCAGAATCCCATCCACCACAGCCGCTTCAA
 CTCAGAACTAAGCATTCTGAAAATCATTGCTGTTTGGACCATATCAGTAGGTATATCCATGCCAATA
 CCACTCTTTGGGCTACAGGACGATTCTGAAGTCTTTAAGGAGGGGAGTTGCTTACTCGCCGATGATAACT
 TTGTCCTGATCGGCTCTTTGTGTCATTTTTCATTCCCTTAACCATCATGGTGATCACCTACTTTCTAAC
 TATCAAGTCACTCCAGAAAGAAGCTACTTTGTGTGTAAGTGATCTTGGCACACGGGCCAAATTAGCTTCT
 TTCAGTTCCTCCCTCAGAGTCTTTGTCTTACAGAAAAGCTCTCCAGCGGTTCGATCCATAGGGAGCCAG
 GGTCTACACAGGCAGGAGGACTATGCAGTCCATCAGCAATGAGCAAAAGGCATGCAAGGTGCTGGGCAT
 CGTCTTCTCTGTTTGTGGTGATGTGGTGCCTTTCTTATCACAAACATCATGGCCGTCATCTGCAAA
 GAGTCTGCAATGAGGATGTCTACACACTGTTCAACAAGACTATAGGTCAGCCTTTTACGCGTATATTCAGT
 TCAGTACAAGGAAAAACAAAAACCATTCAGTTAATTTTGTGAACACAATACCGGCTTTGGCCTACAAG
 TCTAGCCAACTTCAAATGGGACAAAAAAGAATTCAAAGCAAGATGCCAAGACAACAGATATGACTGCT
 CAATGGTTGCTCTAGGAAAGCAGCATTCTGAAGAGGCTTCTAAAGACAATAGCGACGGAGTGAATGAAAA
 GGTGAGCTGTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG210182 representing NM_000621
 Red=Cloning site Green=Tags(s)

MDILCEENTSLSSTTNSLMQLNDDTRLYSNDFNSGEANTSDAFNWTVDSENRTNLSCEGCLSPSCLSLHL
 LQEKNSALLTAVVIILTIAGNILVIMAVSLEKKLQONATNYFLMSLAIADMLLGFVMPVSMILTILYGYR
 WPLPSKLCVWIYLDVLFSTASIMHLCAISLDRYVAIQNPPIHHSRFRNSRTKAFKIIAVWTISVGI SMP I
 PVFGLQDDSKVFKEGSCLLADDFVLIIGSFVSFFIPLTIMVITYFLTIKSLQKEATLCVSDLGTRAKLAS
 FSFLPQSSLSEKLFQRSIHREPGSYTGRRTMQSISNEQKACKVLGIVFFLVVMMWCPFFITNIMAVICK
 ESCNEDVIGALLNVFVWIGYLSAVNPLVYTLFNKTYRSASF SRYIQCYKENKKPLQLILVNTIPALAYK
 SSQLQMGQKKNKQDAKTTDNDCSMVALGKQHSEEAASKDNSDGVNEKVSVCV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_000621

ORF Size: 1413 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](#)

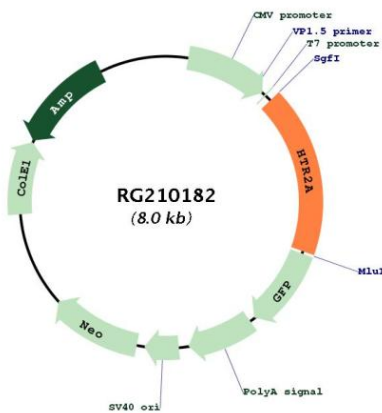
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000621.5](#)
RefSeq Size: 3009 bp
RefSeq ORF: 1416 bp
Locus ID: 3356
UniProt ID: [P28223](#)
Cytogenetics: 13q14.2
Domains: 7tm_1
Protein Families: Druggable Genome, GPCR, Transmembrane
Protein Pathways: Calcium signaling pathway, Gap junction, Neuroactive ligand-receptor interaction
Gene Summary: This gene encodes one of the receptors for serotonin, a neurotransmitter with many roles. Mutations in this gene are associated with susceptibility to schizophrenia and obsessive-compulsive disorder, and are also associated with response to the antidepressant citalopram in patients with major depressive disorder (MDD). MDD patients who also have a mutation in intron 2 of this gene show a significantly reduced response to citalopram as this antidepressant downregulates expression of this gene. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009]

Product images:



Circular map for RG210182