

Product datasheet for **RG228312**

5 HT 2A (HTR2A) (NM_001165947) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	5 HT 2A (HTR2A) (NM_001165947) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HTR2A
Synonyms:	5-HT2A; HTR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228312 representing NM_001165947 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGTTTTTGAAGTCAGCAAACAGAAACCAAATTAATCATATTATGCTGGTGAAGATCAAGAAG
AGGGGACTCTACACCAGTTTAATTAAGTGTGAGAGATGCAGCGAGTACAGAAATAACAAATGTATCTCATG
TGTGGACCCTGAAGACAAATGGTACCGGTGGCCTCTGCCGAGCAAGCTTTGTGCAGTCTGGATTTACCTG
GACGTGCTTTTCCACGGCCTCCATCATGCACCTCTGCGCCATCTCGCTGGACCCTACGTCGCCATCC
AGAATCCCATCCACCACAGCCGTTCAACTCCAGAACTAAGGCATTTCTGAAAATCATTGCTGTTTGGAC
CATATCAGTAGGTATATCCATGCCAATACCAGTCTTTGGGCTACAGGACGATTGAAAGGCTTTAAGGAG
GGGAGTTGCTTACTCGCCGATGATAACTTTGTCCTGATCGGCTCTTTTGTGCATTTTTTCATCCCTTAA
CCATCATGGTGATCACCTACTTTCTAATCAAGTCACTCCAGAAAGAAGCTACTTTGTGTGAAGTGA
TCTTGGCACACGGGCCAAATTAGCTTCTTTTCCAGCTTCTCCCTCAGAGTCTTTTGTCTTCAGAAAAGCTC
TTCCAGCGGTGATCCATAGGGAGCCAGGGTCTACACAGGCAGGAGGACTATGCAGTCCATCAGCAATG
AGCAAAAGGCATGCAAGGTGCTGGGCATCGTCTTCTTCTGTTTGTGGTGATGTGGTGCCTTTCTTCAT
CACAAACATCATGGCCGTCATCTGCAAAGAGTCTGCAATGAGGATGTCATTGGGGCCCTGCTCAATGTG
TTTGTGATCGGTTATCTCTTTCAGCAGTCAACCCACTAGTCTACACACTGTTCAACAAGACCTATA
GGTCAGCCTTTTACGGTATATTCAAGTGTGAGTACAAGGAAAACAAAAACCATTGCAGTTAATTTTGTG
GAACACAATACCGGCTTTGGCCTACAAGTCTAGCAACTTCAAATGGGACAAAAAAGAATTCAAAGCAA
GATGCCAAGACAACAGATAATGACTGCTCAATGGTTGCTAGGAAAGCAGCATTCTGAAGAGGCTTCTA
AAGACAATAGCGACGGAGTGAATGAAAAGGTGAGCTGTGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG228312 representing NM_001165947
 Red=Cloning site Green=Tags(s)

MQFLKSAKQKPNYYHIMLVEDQEEGLHQFNVCERCSESQNNKCISCVDPEDKWYRWPLPSKLCVAVWIYL
 DVLVSTASIMHLCAISLDRYVAIQNPIHHSRFSNRKAFKIIAVWTISVGISMPVFLQDDSKVFKE
 GSCLLADDNFVLIGSFVFFIPLTIMVITYFLTIKSLQKEATLCVSDLGTRAKLASFSFLPQSSLSEKL
 FQRSIHREPGSYTGRRTMQSISNEQKACKVLGIVFFLVVMWCPFFITNIMAVICKESCNEDEVIGALLNV
 FVWIGYLSAVNPLVYTLFNKTYRSAFSRYIQCYKENKKPLQLILVNTIPALAYKSSQLQMGGQKNSKQ
 DAKTTDNDCSMVALGKQHSEEASKDNSDGVNEKVSCV

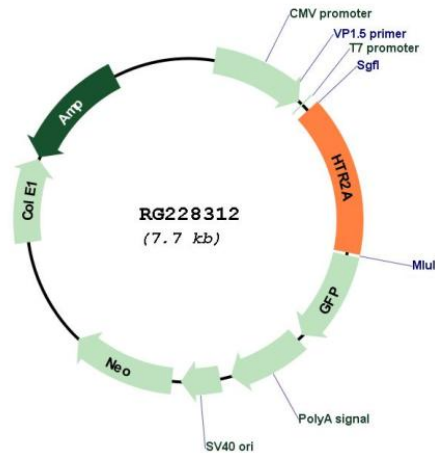
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001165947

ORF Size:	1161 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:	<ol style="list-style-type: none">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_001165947.3
RefSeq Size:	2824 bp
RefSeq ORF:	927 bp
Locus ID:	3356
UniProt ID:	P28223
Cytogenetics:	13q14.2
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]