

Product datasheet for **SC119793**

5 HT 2A (HTR2A) (NM_000621) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	5 HT 2A (HTR2A) (NM_000621) Human Untagged Clone
Tag:	Tag Free
Symbol:	5 HT 2A
Synonyms:	5-HT2A; HTR2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC119793 sequence for NM_000621 edited (data generated by NextGen Sequencing)

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ATGGATATTCTTTGTGAAGAAAATACTTCTTTGAGCTCAACTACGAACTCCCTAATGCAATTAATGATG
ACAACAGGCTCTACAGTAATGACTTTAACTCCGGAGAAGCTAACACTTCTGATGCATTTAACTGGACAGT
CGACTCTGAAAAATCGAACCAACCTTTCCTGTGAAGGGTGCCTCTCACCGTCGTCTCTCCTTACTTCAT
CTCCAGGAAAAAACTGGTCTGCTTTACTGACAGCCGTAGTGATTATTCTAACTATTGCTGGAAACATAC
TCGTATCATGGCAGTGTCCCTAGAGAAAAAGCTGCAGAATGCCACCAACTATTTCTGATGTCACCTTGC
CATAGCTGATATGCTGCTGGGTTTCTTGTGCATGCCCGTGTCCATGTTAACCATCCTGTATGGGTACCGG
TGGCCTCTGCCGAGCAAGCTTTGTGCAGTCTGGATTTACCTGGACGTGCTCTTCTCCACGGCCTCCATCA
TGCACCTCTGCGCATCTCGCTGGACCGCTACGTGCCATCCAGAATCCCATCCACCACAGCCGCTTCAA
CTCCAGAATAAGGCATTTCTGAAAATCATTGCTGTTTGGACCATATCAGTAGGTATATCCATGCCAATA
CCAGTCTTTGGGCTACAGGACGATTGAAAGTCTTTAAGGAGGGGAGTTGCTTACTCGCCGATGATAACT
TTGTCCTGATCGGCTCTTTTGTGTCATTTTTCATTCCCTTAACCATCATGGTGATCACCTACTTTCTAAC
TATCAAGTCACTCCAGAAAGAAGCTACTTTGTGTGTAAGTGATCTTGGCACACGGGCCAAATTAGCTTCT
TTCAGTTTCTCCCTCAGAGTTCTTTGTCTTCAGAAAAGCTTTCAGCGGTCGATCCATAGGGAGCCAG
GGTCTACACAGGCGAGGAGGACTATGCAGTCCATCAGCAATGAGCAAAAGGCATGCAAGGTGCTGGGCAT
CGTCTTCTTCTGTTTGTGGTGATGTGGTGCCTTTTCTTCATCACAACATCATGGCCGTCATCTGCAAA
GAGTCTGCAATGAGGATGTCTTGGGGCCCTGCTCAATGTGTTTGTGGATCGGTTATCTCTCTTCAG
CAGTCAACCCACTAGTCTACACACTGTTCAACAAGACCTATAGGTCAGCCTTTTCACGGTATATTCAGTG
TCAGTACAAGGAAAAACAAAAACCATTGCAGTTAATTTTAGTGAACACAATACCGGCTTTGGCCTACAAG
TCTAGCCAACTTCAAATGGGACAAAAAAGAATTCAAAGCAAGATGCCAAGACAACAGATAATGACTGCT
CAATGGTTGCTCTAGGAAAGCAGCATTCTGAAGAGGCTTCTAAAGACAATAGCGACGGAGTGAATGAAAA
GGTGAGCTGTGTGA
    
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Clone variation with respect to NM_000621.4
74:a=>c

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_000621 unedited
GCANAANAGGGGACTCTACACCAGTTTAACTACTGTGAGAGATGCAGCGAGTACAGAAT
AACAAATGATATCTCATGTGTGGACCCTGAAGACAAATGACATTTATCTCCCGAGCGCTC
AAAAAAACCCTGCAACCTCTATGCTAAAAGTTTCACTTCTGCTTTTTTGTCTCGGTTTTT
TTTATTAATAATAAAACCAACAGTGGACTCTCCTAAAATTGTGAATGAAGAAAACCTT
ACAGCCACCACAGTTCAGTTCCTTAACTATCATTGTAATAATGGAAGACAAAAATCCAGC
CCCGGGAGAACAGCATGTACACCAGCCTCAGTGTACAGAGTGTGGGTACATCAAGGTGA
ATGGTGAGCAGAACTATAACCTGTTAGTCCTTACACCTCATCTGCTACAAGTCTGG
CTTAGACATGGATATTCTTTGTGAAGAAAATACTTCTTTGAGCTCAACTACGAACTCCCT
AATGCAATTAATGATGACAACAGGCTCTACAGTAATGACTTTAACTCCGAGAAAGCTAA
CACTTCTGATGCATTTAACTGGACAGTCTGACTCTGAAAATCGAACCAACCTTTCTGTGA
AGGGTGCCTCTCACCGTCGTGTCTCCTTACTTCATCTCCAGGAAAAAACTGGTCTGC
TTTACTGACAGCCGTAGTGATTATTCTAACTATTGCTGNGAACATACTCGTCATCATGGC
AGTGTCCCTAGAGAAAAAGCTGCAGAATGCCACCAACTATTTCTGATGTCACCTTGCAT
AGCTGATATGCTGCTGGGTTTCTTGTGCATGCCCGTGTCCATGTTAACCATCCTGTATGG
GTACCCGTGGCCTCTGCCGAGCAGCTTTGTGCAGTCTGGATT
    
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3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000621 unedited GCGGCACGCAATCTAGTATCGAGTTTTTTTTTTTTTTTTTTTTTTGTGATAGGGTCTCACTCTG TTGCCAGGAGGAAATGGCAGTGGTGTGAACCTGGCTCACTGCAGCCTTGAGCTTCTGGG CTCAAGTGATCCTTGCCTCAGCCTCCCCTGTAGCTGGGACCACAGTTGTGTGCCACAA GGATCAGATAATTTTTGATTTTTTTGTAGAGACAGGGAGGTCTCACTTTGTTACCCAG GTTGGTCTCAAACCTTTGGCCTCAAGTGATCCTCCCATCTCAGCCTCCCAAAGTGCTAGG ATTACATGCACGAGCCTCCGTGCCTGGCCGAGCCATTTTCGTTTGAAGGCAAGGATTTTGT TTTAATTATTTTTATATTTCTCATATCTAGAAATTTGCTTCACACATAAAATGTACACTCA ATAGATGATTGTGGAACCAAGCAGAATGGTTTTAATAAATAGTATAAACCGATGGATCTG AAAGCATCAGTTTACCTGATGAGTGTGCATAGGAAAGTCACCTGCTTTTTACAGAGATGTC CTAAGACTCTACCACTGTCAGTAGCCGAAACCTGAGTTCATCCTCAATCCTGACACAGT TACATCAATATACATTTACTGCTCAAAGAGTGCATGCATGATGCAGTCATTTACAGCA AGTTACCAAATACCTCGATAGTGTGTTTTAGAAGAGCAATTGCTAGAAAAGCATTGTTGGT AATGGTAAATCATCCTTTTGTAGTTACCTAGAGGAACAATTAACNAGACACACTGG AATTCAGAGTAAGCCCAGAAGTGAAGAGAAGCAGCATAGCTATGGATACATTTGAGTCTT TCACTCTGAGATTACTTGAATGCCCAATGCCACACCCTGGATATTTCAAATGTTCTATG AAAACAGATGAAAATGGTGCAGTTTTATTAATATT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_000621
Insert Size:	3300 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	The ORF of this clone has been fully sequenced and found to contain one SNP compared with NM_000621.2.
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:	<u>NM_000621.2, NP_000612.1</u>
RefSeq Size:	5442 bp
RefSeq ORF:	1416 bp
Locus ID:	3356
UniProt ID:	<u>P28223</u>
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:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>