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Product datasheet for RC228312

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:	Myc-DDK
Symbol:	5 HT 2A
Synonyms:	5-HT2A; HTR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC228312 representing NM_001165947
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGTTTTTGAAGTCAGCAAAACAGAAACCAAATTACTATCATATTATGCTGGTGGAAGATCAAGAAG
AGGGGACTCTACACCAGTTTAATTACTGTGAGAGATGCAGCGAGTCACAGAATAACAAATGTATCTCATG
TGTGGACCCTGAAGACAAATGGTACCGGTGGCCTCTGCCGAGCAAGCTTTGTGCAGTCTGGATTTACCTG
GACGTGCTCTTCTCCACGGCCTCCATCATGCACCTCTGCGCCATCTCGCTGGACCGCTACGTCGCCATCC
AGAATCCCATCCACCACAGCCGCTTCAACTCCAGAACTAAGGCATTTCTGAAAATCATTGCTGTTTGGAC
CATATCAGTAGGTATATCCATGCCAATACCAGTCTTTGGGCTACAGGACGATTCGAAGGTCTTTAAGGAG
GGGAGTTGCTTACTCGCCGATGATAACTTTGTCCTGATCGGCTCTTTTGTGTCATTTTTCATTCCCTTAA
CCATCATGGTGATCACCTACTTTCTAACTATCAAGTCACTCCAGAAAGAAGCTACTTTGTGTGTAAGTGA
TCTTGGCACACGGGCCAAATTAGCTTCTTTCAGCTTCCTCCCTCAGAGTTCTTTGTCTTCAGAAAAGCTC
TTCCAGCGGTCGATCCATAGGGAGCCAGGGTCCTACACAGGCAGGAGGACTATGCAGTCCATCAGCAATG
AGCAAAAGGCATGCAAGGTGCTGGGCATCGTCTTCTTCCTGTTTGTGGTGATGTGGTGCCCTTTCTTCAT
CACAAACATCATGGCCGTCATCTGCAAAGAGTCCTGCAATGAGGATGTCATTGGGGCCCTGCTCAATGTG
TTTGTTTGGATCGGTTATCTCTCTTCAGCAGTCAACCCACTAGTCTACACACTGTTCAACAAGACCTATA
GGTCAGCCTTTTCACGGTATATTCAGTGTCAGTACAAGGAAAACAAAAAACCATTGCAGTTAATTTTAGT
GAACACAATACCGGCTTTGGCCTACAAGTCTAGCCAACTTCAAATGGGACAAAAAAAGAATTCAAAGCAA
GATGCCAAGACAACAGATAATGACTGCTCAATGGTTGCTCTAGGAAAGCAGCATTCTGAAGAGGCTTCTA
AAGACAATAGCGACGGAGTGAATGAAAAGGTGAGCTGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC228312 representing NM_001165947
Red=Cloning site Green=Tags(s)

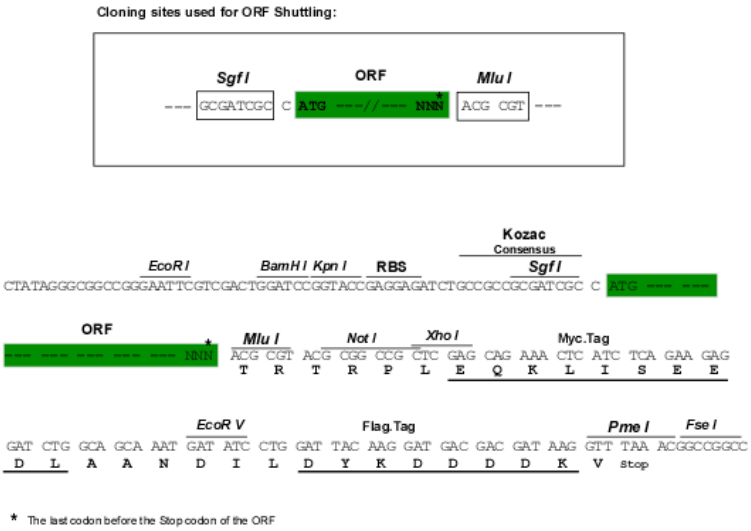
MQFLKSAKQKPNYYHIMLVEDQEEGTLHQFNYCERCSESQNNKCISCVDPEDKWYRWPLPSKLCAVWIYL
DVLFSTASIMHLCAISLDRYVAIQNPIHHSRFNSRTKAFLKIIAVWTISVGISMPIPVFGLQDDSKVFKE
GSCLLADDNFVLIGSFVSFFIPLTIMVITYFLTIKSLQKEATLCVSDLGTRAKLASFSFLPQSSLSSEKL
FQRSIHREPGSYTGRRTMQSISNEQKACKVLGIVFFLFVVMWCPFFITNIMAVICKESCNEDVIGALLNV
FVWIGYLSSAVNPLVYTLFNKTYRSAFSRYIQCQYKENKKPLQLILVNTIPALAYKSSQLQMGQKKNSKQ
DAKTTDNDCSMVALGKQHSEEASKDNSDGVNEKVSCV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4359_f08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001165947

ORF Size: 1161 bp

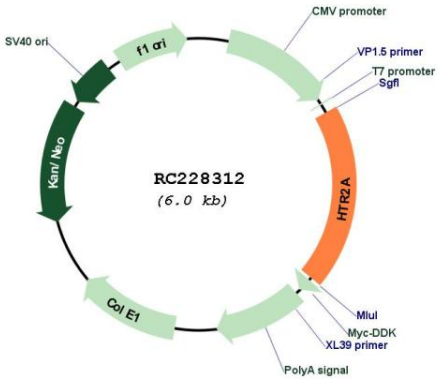
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

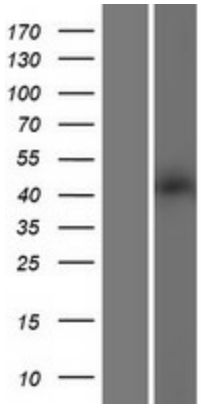
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001165947.3
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
MW:	43.8 kDa
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 RC228312



Western blot validation of overexpression lysate (Cat# [LY431340]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228312 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).