

Product datasheet for **RR207006**

Htr2c (NM_012765) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Htr2c (NM_012765) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Htr2c
Synonyms:	5-HT2C; 5-HTR2C; 5HT-1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RR207006 representing NM_012765
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGAACCTTGGCAACGCGGTGCGCTCGCTCCTGATGCACCTAATCGGCCTATTGGTTTGGCAATTCCG
 ATATTTCCATAAGTCCAGTAGCAGCTATAGTAAGTACACTTTTAATTCCTCCGATGGTGGACGCTTGTT
 TCAATTCGGACGGGGTACAAAAGTGGCCAGCACTTTCAATCGTCGTGATTATAATCATGACAATAGGG
 GGCAACATTCTTGTATCATGGCAGTAAGCATGGAGAAGAACTGCACAATGCAACCAATTACTTCTTAA
 TGTCCCTAGCCATTGCTGATGCTGGTGGGACTACTTGTATGCCCTGTCCCTGCTTGTATTCTTTA
 TGATTATGCTGGCCTTACCTAGATATTTGTGCCCGTCTGGATTTCACTAGATGTGCTATTTCAACT
 GCGTCCATCATGCACCTCGGCCATATCGCTGGACCGGTATGTAGCAATACGTAATCCTATTGAGCATA
 GCCGGTCAATTCGGGACTAAGGCCATCATGAAGATTGCCATCGTTTGGCAATATCAATAGGAGTTTC
 AGTTCCTATCCCTGTGATTGGACTGAGGGACGAAAGCAAAGTGTTCGTGAATAACACCACGTGCGTGCTC
 AATGACCCCAACTTCGTTCTCATCGGGTCTTCGTGGCATTCTTCATCCCGTTGACGATTATGGTATCA
 CCTACTTCTTAACGATCTACGTCCTGCGCCGCTCAAACCTCTGATGTTACTTCGAGGTACACCCGAGGAGGA
 ACTGGCTAATATGAGCCTGAACCTTCTGAACTGCTGCTGCAAGAAGAATGGTGGTGGAGGAAGAGAACGCT
 CCGAACCCTAATCCAGATCAGAAACCACGTCGAAAGAAGAAAGAAAGCGTCCCAGAGGCACCATGCAAG
 CTATCAACAACGAAAAGAAAGCTTCAAAGTCTTGGCATTGTATTCTTTGTGTTTCTGATCATGTGGTG
 CCCGTTTTTATCACCAATATCCTGTGCGTTCTTTGTGGGAAGGCCTGTAACCAAAAGCTAATGGAGAAG
 CTTCTCAATGTGTTTGTGTGGATTGGCTATGTGTGTTGAGGCATCAATCCTCTGGTGTACACTCTCTTA
 ATAAAATTTACCGAAGGGCTTTCTCAAATATTTGCGCTGCGATTATAAGCCAGACAAAAGCCTCCTGT
 TCGACAGATTCTAGGGTTGCTGCCACTGTTTGTCTGGGAGGGAGCTCAATGTTAACATTATCGGCAT
 ACCAATGAACGTGTGGCTAGGAAAGCTAATGACCTGAGCCTGGCATAGAGATGCAGGTGGAGAAGTTAG
 AGCTGCCAGTCAACCCCTCTAATGTGGTCAGCGAGAGGATTAGTAGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR207006 representing NM_012765
 Red=Cloning site Green=Tags(s)

MVNLGNAVRSLLMHLIGLLVWQFDISISPVAAIVTDTFNSSDGGRLFQFPDGVQNPALSIVVIIIMTIG
 GNILVIMAVSMKKLHNATNYFLMSLAIDMLVGLLVMPLSLLAILYDYVWPLPRYLCPVWISLDVLFST
 ASIMHLCAISLDRYVAIRNPIEHSRFRNSRTKAIMKIAIVWAISIGVSVPIPVIGLRDESKVFNNTTCVL
 NDPNFVLIGSFVAFFIPLTIMVITYFLTIYVLRQTLMLLRGHTEEELANMSLNFLNCCCKNGGEEENA
 PNPNDQKPRRKKKEKRPRGTMQAINNEKKASKVLGIVFFVFLIMWCPFFITNILSVLGGKACNQKLEK
 LLNVFVWIGYVCSGINPLVYTLFNKIYRRAF SKYLRCDYKPKPPVQRQIPRVAATALSGRELNVNIYRH
 TNERVARKANDPEPGIEMQVENLELPVNPSNVVSSERISSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1799_d11.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_012765

ORF Size: 1380 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.

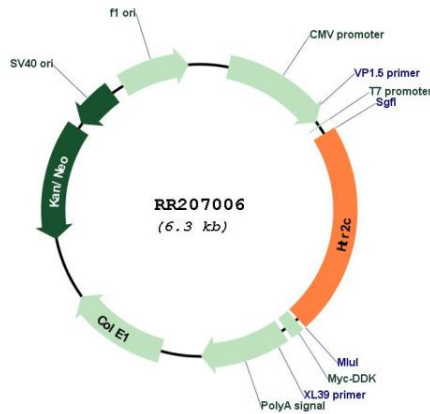
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_012765.3, NP_036897.2](#)
RefSeq Size: 4402 bp
RefSeq ORF: 1383 bp
Locus ID: 25187
UniProt ID: [P08909](#)
Cytogenetics: Xq34
MW: 52.4 kDa

Gene Summary: Serotonin (5-hydroxytryptamine, 5-HT), a neurotransmitter, elicits a wide array of physiological effects by binding to several receptor subtypes, including the 5-HT2 family of seven-transmembrane-spanning, G-protein-coupled receptors, which activate phospholipase C and D signaling pathways. This gene encodes the 2C subtype of serotonin receptor and its mRNA is subject to multiple RNA editing events, where genomically encoded adenosine residues are converted to inosines. RNA editing is predicted to alter amino acids within the second intracellular loop of the 5-HT2C receptor and generate receptor isoforms that differ in their ability to interact with G proteins and the activation of phospholipase C and D signaling cascades, thus modulating serotonergic neurotransmission in the central nervous system. Studies in rodents show altered patterns of RNA editing in response to drug treatments and stressful situations. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RR207006