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Product datasheet for RC217340

HTR2C (NM_000868) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HTR2C (NM_000868) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HTR2C
Synonyms:	5-HT1C; 5-HT2C; 5-HTR2C; 5HTR2C; HTR1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC217340 representing NM_000868
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGAACCTGAGGAATGCGGTGCATTCATTCCTTGTGCACCTAATTGGCCTATTGGTTTGGCAATGTG
ATATTTCTGTGAGCCCAGTAGCAGCTATAGTAACTGACATTTTCAATACCTCCGATGGTGGACGCTTCAA
ATTCCCAGACGGGGTACAAAACTGGCCAGCACTTTCAATCGTCATCATAATAATCATGACAATAGGTGGC
AACATCCTTGTGATCATGGCAGTAAGCATGGAAAAGAAACTGCACAATGCCACCAATTACTTCTTAATGT
CCCTAGCCATTGCTGATATGCTAGTGGGACTACTTGTCATGCCCCTGTCTCTCCTGGCAATCCTTTATGA
TTATGTCTGGCCACTACCTAGATATTTGTGCCCCGTCTGGATTTCTTTAGATGTTTTATTTTCAACAGCG
TCCATCATGCACCTCTGCGCTATATCGCTGGATCGGTATGTAGCAATACGTAATCCTATTGAGCATAGCC
GTTTCAATTCGCGGACTAAGGCCATCATGAAGATTGCTATTGTTTGGGCAATTTCTATAGGTGTATCAGT
TCCTATCCCTGTGATTGGACTGAGGGACGAAGAAAAGGTGTTCGTGAACAACACGACGTGCGTGCTCAAC
GACCCAAATTTCGTTCTTATTGGGTCCTTCGTAGCTTTCTTCATACCGCTGACGATTATGGTGATTACGT
ATTGCCTGACCATCTACGTTCTGCGCCGACAAGCTTTGATGTTACTGCACGGCCACACCGAGGAACCGCC
TGGACTAAGTCTGGATTTCCTGAAGTGCTGCAAGAGGAATACGGCCGAGGAAGAGAACTCTGCAAACCCT
AACCAAGACCAGAACGCACGCCGAAGAAAGAAGAAGGAGAGACGTCCTAGGGGCACCATGCAGGCTATCA
ACAATGAAAGAAAAGCTTCGAAAGTCCTTGGGATTGTTTTCTTTGTGTTTCTGATCATGTGGTGCCCATT
TTTCATTACCAATATTCTGTCTGTTCTTTGTGAGAAGTCCTGTAACCAAAAGCTCATGGAAAAGCTTCTG
AATGTGTTTGTTTGGATTGGCTATGTTTGTTCAGGAATCAATCCTCTGGTGTATACTCTGTTCAACAAAA
TTTACCGAAGGGCATTCTCCAACTATTTGCGTTGCAATTATAAGGTAGAGAAAAAGCCTCCTGTCAGGCA
GATTCCAAGAGTTGCCGCCACTGCTTTGTCTGGGAGGGAGCTTAATGTTAACATTTATCGGCATACCAAT
GAACCGGTGATCGAGAAAGCCAGTGACAATGAGCCCGGTATAGAGATGCAAGTTGAGAATTTAGAGTTAC
CAGTAAATCCCTCCAGTGTGGTTAGCGAAAGGATTAGCAGTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217340 representing NM_000868
Red=Cloning site Green=Tags(s)

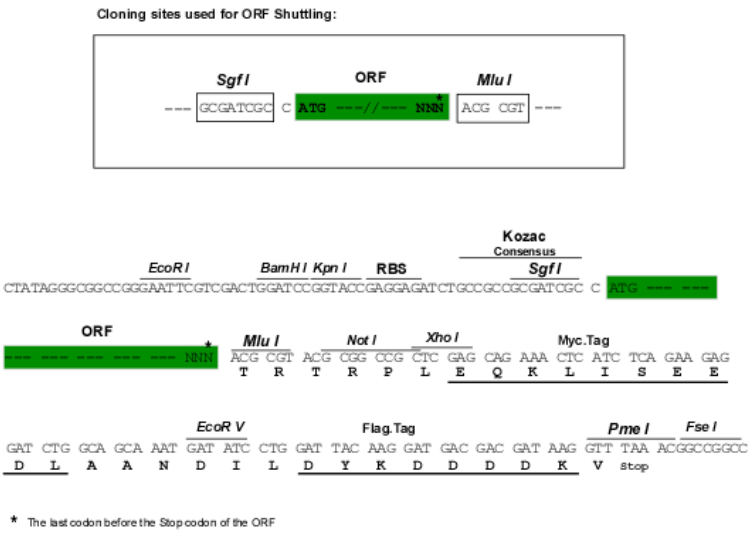
MVNLRNAVHSFLVHLIGLLVWQCDISVSPVAAIVTDIFNTSDGGRFKFPDGVQNWPALSIVIIIIMTIGG
NILVIMAVSMEKKLHNATNYFLMSLAIADMLVGLLVMPLSLLAILYDYVWPLPRYLCPVWISLDVLFSTA
SIMHLCAISLDRYVAIRNPIEHSRFNSRTKAIMKIAIVWAISIGVSVPIPVIGLRDEEKVFVNNTTCVLN
DPNFVLIGSFVAFFIPLTIMVITYCLTIYVLRRQALMLLHGHTEEPPGLSLDFLKCCKRNTAEEENSANP
NQDQNARRRKKKERRPRGTMQAINNERKASKVLGIVFFVFLIMWCPFFITNILSVLCEKSCNQKLMEKLL
NVFVWIGYVCSGINPLVYTLFNKIYRRAFSNYLRCNYKVEKKPPVRQIPRVAATALSGRELNVNIYRHTN
EPVIEKASDNEPGIEMQVENLELPVNPSSVVSERISSV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6275_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000868

ORF Size: 1374 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.

RefSeq: NM_000868.3

RefSeq Size: 4775 bp

RefSeq ORF: 1377 bp

Locus ID: 3358

UniProt ID: P28335

Cytogenetics: Xq23

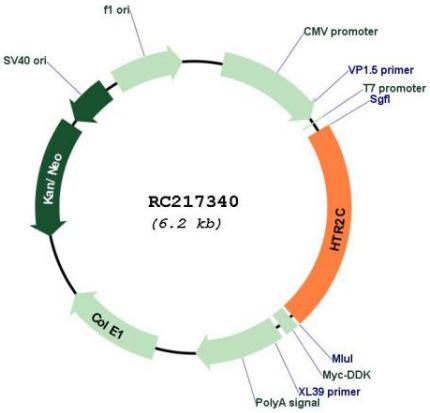
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Calcium signaling pathway, Gap junction, Neuroactive ligand-receptor interaction

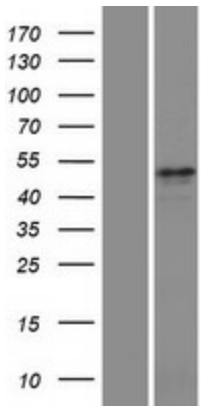
MW: 51.6 kDa

Gene Summary: This gene encodes a seven-transmembrane G-protein-coupled receptor. The encoded protein responds to signaling through the neurotransmitter serotonin. The mRNA of this gene is subject to multiple RNA editing events, where adenosine residues encoded by the genome are converted to inosines. RNA editing is predicted to alter the structure of the second intracellular loop, thereby generating alternate protein forms with decreased ability to interact with G proteins. Abnormalities in RNA editing of this gene have been detected in victims of suicide that suffer from depression. In addition, naturally-occuring variation in the promoter and 5' non-coding and coding regions of this gene may show statistically-significant association with mental illness and behavioral disorders. Alternative splicing results in multiple different transcript variants. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RC217340



Western blot validation of overexpression lysate (Cat# [LY424472]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217340 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).