

Product datasheet for **RG213760**

Orexin Receptor 2 (HCRTR2) (NM_001526) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Orexin Receptor 2 (HCRTR2) (NM_001526) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Orexin Receptor 2
Synonyms:	ORXR2; OX2R; OXR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213760 representing NM_001526
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCCGGCACCAAATTGGAGGACTCCCCCCTTGTCCGCAACTGGTCATCTGCTTCGGAGCTGAATGAAA
 CTCAAGAGCCCTTTTAAACCCACCGACTATGACGACGAGGAATTCCTGCGGTACCTGTGGAGGGAATA
 CCTGCACCCGAAAGAATATGAGTGGTCTGATCGCCGGGTACATCATCGTGTTCTGTCGTGGCTCTCATT
 GGAACGTCTGGTTTGTGTGGCAGTGTGGAAGAACCACCACATGAGGACGGTAACCACTACTTCATAG
 TCAATCTTTCTGGCTGATGTGCTCGTGACCATCACCTGCCTCCAGCCACACTGGTCGTGGATATCAC
 TGAGACCTGGTTTTTGGACAGTCCCTTGCAAAGTGATTCCTTATCTACAGACCGTGTCCGGTGTCTGTG
 TCTGTCTCACACTGAGCTGTATCGCTTGGATCGGTGGTATGCAATCTGTCACCCTTGTATGTTAAGA
 GCACAGCAAAGCGGGCCCGTAACAGCATTGTATCATCTGGATTGTCTCCTGCATTATAATGATTCCTCA
 GGCCATCGTCATGGAGTGCAGCACCCTGTTCCAGGCTTAGCCAATAAACACCCTCTTACGGTGTGT
 GATGAGCGCTGGGTGGTAAATTTATCCAAGATGTACCACATCTGTTTCTTCTGGTGACATACATGG
 CACCACCTGTCTCATGGTGTGGCTTATCTGCAAATATTTGCAAACCTCTGGTGTGCAGACATCCCTGG
 AACATCATCTGTAGTTCAGAGAAAATGGAAGCCCTGCAGCCTGTTTACAGCCTCGAGGGCCAGGACAG
 CCAACGAAGTCCCGGATGAGCGCTGTGGCGGTGAAATAAAGCAGATCCGAGCCAGAAGGAAAACAGCCC
 GGATGTTGATGATTGTGCTTTTGGTATTTGCAATTTGCTATCTACCAATTAGCATCTCAATGTGCTAAA
 GAGAGTATTTGGGATGTTGCCATACTGAAGACAGAGAGACTGTGTATGCCTGGTTTACCTTTTACAC
 TGGCTTGTATATGCCAATAGTCCCGCAATCCAATTTATAATTTTCTCAGTGGAAAATTTTCGAGAGG
 AATTTAAAGCTGGTTTTCTTGTGCTTGGAGTTCACCATCGCCAGGAGGATCGGCTCACCAGGGG
 ACGAACTAGCACAGAGAGCCGGAAGTCTTGACCACTCAAATCAGCAACTTTGATAACATATCAAACCTT
 TCTGAGCAAGCTGTGCTCACTAGCATAAGCACACTCCAGCAGCCAATGGAGCAGGACCACTTCAAACCT
 GG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213760 representing NM_001526
 Red=Cloning site Green=Tags(s)

MSGTKLEDSPPCRNWSSASELNETQEPFLNPTDYDDEEFLRYLWREYLHPKEYEWVLIAGYIIVFVVALI
 GNVLVCAVAVWKNHMRVTNYFIVNLSLADVLVTITCLPATLVVDITETWFFGQSLCKVIPYLQTVSVSV
 SVLTLSCIALDRWYAICHPLMFKSTAKRARNISIVIIWIVSCIIMIPQAIIVMECSTVFPGLANKTTLFTVC
 DERWGGEIYPKMYHICFFLVTYMAPLCLMVLAYLQIFRKLWCRQIPGTSSVVQRKWKPLQPVSQPRGPGQ
 PTKSRMSAVAAEIKQIRARRKTARMLMIVLLVFAICYLPISILNVLKRVMFAHTEDRETYYAWFTFSH
 WLYYANSAANPIIYNFLSGKFREEFKAAFSCCCLGVHHRQEDRLTRGRTSTESRKSLLTQISNFDNISKL
 SEQAVLTSISTLPAANGAGPLQNW

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001526

ORF Size: 1332 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.

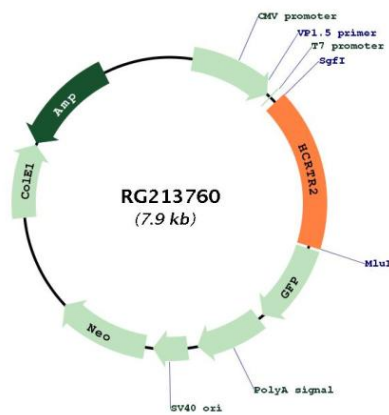
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001526.2](#), [NP_001517.1](#)

RefSeq Size:	1843 bp
RefSeq ORF:	1335 bp
Locus ID:	3062
UniProt ID:	O43614
Cytogenetics:	6p12.1
Protein Families:	Druggable Genome
Protein Pathways:	Neuroactive ligand-receptor interaction
Gene Summary:	The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein binds the hypothalamic neuropeptides orexin A and orexin B. A related gene (HCRTR1) encodes a G-protein coupled receptor that selectively binds orexin A. [provided by RefSeq, Jan 2009]

Product images:



Circular map for RG213760