

Product datasheet for **RC210381**

Orexin Receptor 1 (HCRTR1) (NM_001525) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Orexin Receptor 1 (HCRTR1) (NM_001525) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Orexin Receptor 1
Synonyms:	ORXR1; OX1R; OXR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210381 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCTCAGCCACCCAGGGGCCAGATGGGGTCCCCCTGGCAGCAGAGAGCCGTCCTGTGC
 CTCCAGACTATGAAGATGAGTTTCTCCGCTATCTGTGGCGTGATTATCTGTACCCAAAACAGTATGAGTG
 GGTCTCATCGCAGCCTATGTGGCTGTGTTCTGTCGTGGCCCTGGTGGCAACACGCTGGTCTGCCTGGCC
 GTGTGGCGGAACCACCACATGAGGACAGTCACCAACTACTTCATTGTCAACCTGTCCCTGGCTGACGTTT
 TGGTGACTGCTATCTGCCTGCCGCCAGCTGCTGGTGGACATCACTGAGTCCTGGCTGTTCCGCCATGC
 CCTCTGCAAGGTCATCCCTATCTACAGGCTGTGTCTGTGTGTCAGTGGCAGTGCTAACTCTCAGTTCATC
 GCCCTGGACCGCTGGTATGCCATCTGCCACCCACTATTGTTCAAGAGCACAGCCCGGCCGGCCCGTGGCT
 CCATCCTGGGCATCTGGGCTGTGTGCTGGCCATCATGGTGCCCGAGGCTGCAGTCATGGAATGCAGCAG
 TGTGCTGCCTGAGCTAGCCAACCGCACAGGCTCTTCTCAGTCTGTGATGAACGCTGGGCAGATGACCTC
 TATCCCAAGATCTACCACAGTTGCTTCTTTATTGTCACCTACCTGGCCCCACTGGGCCTCATGGCCATGG
 CCTATTTCCAGATATTCGCAAGCTCTGGGGCCGCCAGATCCCCGGCACCACTCAGCACTGGTGGGAA
 CTGGAAGCGCCCTCAGACCAGCTGGGGGACCTGGAGCAGGGCCTGAGTGGAGAGCCCCAGCCCCGGGCC
 CGCGCCTTCTGGCTGAAGTGAAGCAGATGCGTGACGGAGGAAGACAGCCAAGATGCTGATGGTGGTGC
 TGCTGGTCTTCGCCCTCTGCTACCTGCCATCAGCGTCTCAATGTCTTAAGAGGGTGTTCGGGATGTT
 CCGCAAGCCAGTGACCGGAAGCTGTCTACGCTGCTTACCTTCTCCCACTGGCTGGTGTACGCCAAC
 AGCGCTGCCAACCCCATCATCTACAACCTCCTCAGTGGCAAATTCGGGAGCAGTTAAGGCTGCCTTCT
 CCTGCTGCCTGCCTGGCCTGGTCCCTGCGGCTCTCTGAAGGCCCTAGTCCCCGCTCCTCTGCCAGCCA
 CAAGTCTTGTCTTGCAGAGCCGATGCTCCATCTCAAAATCTCTGAGCATGTGGTGTCTACCAGCGTC
 ACCACAGTGTGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210381 protein sequence
 Red=Cloning site Green=Tags(s)

MEPSATPGAQMGVPPGSREPSVPPDYEDFLRYLWRDYLYPEKQYEWVLI AAYVAVFVVALVGNLTVCLA
 VWRNHMRTVTNYFIVNLSLADVLVTAICLPASLLVDITESWLFHALCKVIPYLQAVSVSAVL TLF
 ALDRWYAI CHPLLFKSTARRARGSILGIWAVSLAIMVPQAAMVMECSSVLP ELANRTRLFVCDERWADDL
 YPKIYHSCFFIVTYLAPLGLMAMAYFQIFRKLWGRQIPGTT SALVRNWKRPDQLGDLEQGLSGEPQPR
 RAFLAEVKQMRARRKTAKMLMVLLVFALCYLPISVNLVLRVFGMFRQASDREAVYACFTF SHWL
 VYANSAANPIIYNFLSGKFRQKAAFSCCLPGLGPCGSLKAPSPRSSASHKSLSLQSRCSISKISEHVLT
 SVTTVLP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6137_c04.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_001525

ORF Size: 1275 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_001525.3](#)
RefSeq Size: 2001 bp

RefSeq ORF: 1278 bp

Locus ID: 3061

UniProt ID: [O43613](#)
Cytogenetics: 1p35.2

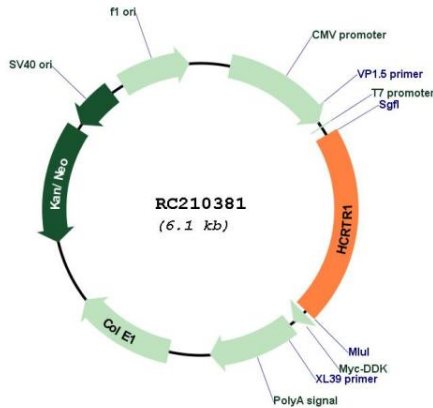
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

MW: 47.5 kDa

Gene Summary: The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein selectively binds the hypothalamic neuropeptide orexin A. A related gene (HCRTR2) encodes a G-protein coupled receptor that binds orexin A and orexin B. [provided by RefSeq, Jan 2009]

Product images:



Circular map for RC210381