

Product datasheet for **MR222890**

Hcrtr2 (NM_198962) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hcrtr2 (NM_198962) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hcrtr2
Synonyms:	mOX2aR; mOX2bR; mOXR2; OX2R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222890 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCAGCACCAAACCTGGAGGATTCCTCTCTCGTCCAACTGGTCATCTGCTTCAGAGCTGAATGAAA
 CTAAGAGCCGTTTTTAAATCCCACGACTATGACGACGAGGAATTCCTGCGGTACTGTGGAGGGAATA
 CCTACACCCGAAAGAATATGAGTGGTCTGATCGCAGGGTATATCATCGTGTTCTGTGGCTCTCATC
 GGAACGTCTGGTCTGTGTGGCAGTGTGGAAGAACCACCACATGAGGACAGTCACCAACTACTTCATAG
 TCAACCTTTCCCTAGCAGATGTGCTTGTGACCATCACCTGCCTCCAGCTACCCTCGTTGTTGACATCAC
 TGAGACTTGGTCTTTGGACAGTCCCTCTGTAAGGTCATTCCTATTTACAGACGGTGTGAGTGTCTGTG
 TCTGTTCTTACGTTGAGCTGCATTGCCCTGGACCGATGGTACGCCATTTGTCACCCTTTGATGTTCAAGA
 GCACAGCCAAACGGGCTCGAAACAGCATCGTTGCATCTGGATTGTCTCCTGCATCATAATGATTCCTCA
 AGCCATTGTCATGGAGTGCAGCAGCATGCTCCCTGGCCTAGCCAATAAGACCACCCTCTTACAGTATGT
 GATGAACACTGGGCGGTGAAGTTACCCAAAGATGTACCATATCTGCTTCTTCTGGTGACATACATGG
 CACCTCTGTGCTTATGGTATTGGCTTATCTCCAAATATTCGGTAAACTCTGGTGCCGACAGATTCCTGG
 AACTTCTTCTGTGGTTCAGAGAAAATGGAAGCAGCAGCAGCCGGTTTCTCAGCCCCGGGGTCCGGACAG
 CAGAGCAAGGCTCGGATTAGCGCTGTGCTGCTGAGATAAAGCAGATCCGAGCACGAAGGAAAACAGCCC
 GGATGCTCATGGTTGACTTCTGGTCTTTGCAATTTGCTATCTACCAATCAGCATCTCAATGTGCTAAA
 GAGAGTATTTGGGATGTTACACACACGGAAGACAGAGACTGTCTATGCTTGGTTCACTTTTTCTCAT
 TGGCTTGTATATGCCAACAGTGTGCAACCCAATTTATAATTTCTTAGTGAAAAATTCGAGAGG
 AATTTAAAGCTGCCTTTCTTGTGCTTGGGTTTCATCATCGCCAAGGAGACCGCTCGCCAGGGGACA
 CACGAGCACAGAGAGCAGGAAGTCCCTGACCACACAGATCAGCAACTTTGACAATGTATCAAACCTCTCA
 GAGCACGTGGTGTCTACCAGCATAAGCACACTCCAGCAGCCAACGGGGCAGGACCGCTTCAAACCTGGT
 ATCTACAGCAGGGAGTACCATCTTCACTCTGTCCACCTGGTGGAGGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222890 protein sequence
 Red=Cloning site Green=Tags(s)

MSSTKLEDSLRRNWSSASELNETQEPFLNPTDYDDEEFLRYLWREYLHPKEYEWWLIAGYIIVFVVALI
 GNVLVCAVWKNHHMRTVTNYFIVNLSLADVLVITCLPATLVVDITETWFFGQSLCKVIPYLQTVSVSV
 SVLTLSCIALDRWYAICHPLMFKSTAKRARNISIVVIWIVSCIIMIPQAIVMECSSMLPGLANKTTLFTVC
 DEHWGGEVYPKMYHICFFLVTYMAPLCLMVLAYLQIFRKLWCRQIPGTSSVVQRKWKQQQPVSQPRGSGQ
 QSKARISAVAAEIKQIRARRKTARMLMVLLVFAICYLPISILNVLKRVFGMFTHTEDRETYYAWFTFSH
 WL VYANSAANPIIYNFLSGKFREEFKAAFSCCLGVHHRQGDRLARGHTSTESRKSLLTTQISNFDNVSKLS
 EHVVLTSISTLPAANGAGPLQNWYLQQGVPSLLSTWLEV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_198962

ORF Size: 1383 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.

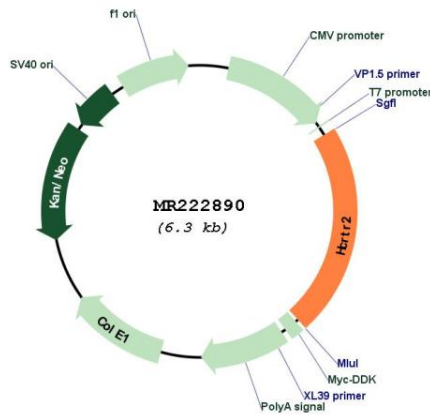
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_198962.1](#), [NM_198962.2](#), [NM_198962.3](#), [NP_945200.1](#)
RefSeq Size: 3728 bp
RefSeq ORF: 1383 bp
Locus ID: 387285
UniProt ID: [P58308](#)
Cytogenetics: 9 D
MW: 52.4 kDa

Gene Summary: Nonselective, high-affinity receptor for both orexin-A and orexin-B neuropeptides. Triggers an increase in cytoplasmic Ca(2+) levels in response to orexin-A binding.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222890