

## Product datasheet for **MG222890**

### Hcrtr2 (NM\_198962) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hcrtr2 (NM_198962) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hcrtr2
Synonyms:	mOX2aR; mOX2bR; mOXR2; OX2R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG222890 representing NM\_198962  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCCAGCACCAAACCTGGAGGATTCCTCTCTCGTCGCAACTGGTCATCTGCTTCAGAGCTGAATGAAA  
 CTAAGAGCCGTTTTTAAATCCCACGACTATGACGACGAGGAATTCCTGCGGTACCTGTGGAGGGAATA  
 CCTACACCCGAAAAGAATATGAGTGGTCTGATCGCAGGGTATATCATCGTGTTCTGTTGGCTCTCATC  
 GGAACGTCTGGTCTGTGTGGCAGTGTGGAAGAACCACCACATGAGGACAGTCACCAACTACTTCATAG  
 TCAACCTTTCCCTAGCAGATGTGCTTGTGACCATCACCTGCCTCCAGCTACCCTCGTTGTTGACATCAC  
 TGAGACTTGGTCTTTGGACAGTCCCTCTGTAAGGTCATTCCTATTTACAGACGGTGTGAGTGTCTGTG  
 TCTGTTCTTACGTTGAGCTGCATTGCCTTGGACCGATGGTACGCCATTTGTACCCTTTGATGTTCAAGA  
 GCACAGCCAAACGGGCTCGAAACAGCATCGTTGCATCTGGATTGTCTCCTGCATCATAATGATTCCTCA  
 AGCCATTGTGATGGAGTGCAGCAGCATGCTCCCTGGCCTAGCCAATAAGACCACCCTCTTACAGTATGT  
 GATGAACACTGGGCGGTGAAGTTTACCCAAAGATGTACCATATCTGCTTCTTCTGGTGACATACATGG  
 CACCTCTGTGCTTATGGTATTGGCTTATCTCCAAATATTCGGTAAACTCTGGTGCCGACAGATCCCGG  
 AACTTCTTCTGTGGTTCAGAGAAAATGGAAGCAGCAGCAGCCGGTTTCTCAGCCCGGGGTCCGGACAG  
 CAGAGCAAGGCTCGGATTAGCGCTGTGCTGCTGAGATAAAGCAGATCCGAGCACGAAGGAAAACAGCCC  
 GGATGCTCATGGTTGACTTCTGGTCTTTGCAATTTGCTATCTACCAATCAGCATCTCAATGTGCTAAA  
 GAGAGTATTTGGGATGTTACACACACGGAAGACAGAGACTGTCTATGCTTGGTTCACTTTTTCTCAT  
 TGGCTTGTATATGCCAACAGTGTGCAACCCAATTATTTATAATTTTCTTAGTGAAAATTTTCGAGAGG  
 AATTTAAAGCTGCCTTTTCTTGTGCTTGGGGTTCATCATCGCCAAGGAGACCGCTCGCCAGGGGACA  
 CACGAGCACAGAGAGCAGGAAGTCCCTGACCACACAGATCAGCAACTTTGACAATGTATCAAACCTCTCA  
 GAGCACGTGGTGTCTACCAGCATAAGCACACTCCAGCAGCCAACGGGGCAGGACCGCTTCAAACCTGGT  
 ATCTACAGCAGGGAGTACCATCTTCACTCTGTCCACCTGGTGGAGGTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG222890 representing NM\_198962  
 Red=Cloning site Green=Tags(s)

MSSTKLEDSLRRNWSSASELNETQEPFLNPTDYDDEEFLRYLWREYLHPKEYEYEWLIAGYIIVFVVALI  
 GNVLVCAVAVWKNHHMRTVTNYFIVNLSLADVLVTITCLPATLVVDITETWFFGQSLCKVIPYLQTVSVSV  
 SVLTLSCIALDRWYAICHPLMFKSTAKRARNISIVVIWIVSCIIMIPQAIIVMECSSMLPGLANKTTLFTVC  
 DEHWGGEVYPKMYHICFFLVTYMAPLCLMVLAYLQIFRKLWCRQIPGTSSVVQRKWKQQPVVSQPRGSGQ  
 QSKARISAVAAEIKQIRARRKTARMLMVLLVFAICYLPISILNVLKRVMFHTHTEDRETYYAWFTFSH  
 WLYYANSAANPIIYNFLSGKFREFKAAFSCCLGVHHRQGDRLARGHTSTESRKSLTTQISNFDNVSKLS  
 EHVVLTSISTLPAANGAGPLQNWYLQQGVPSLLSTWLEV

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<p><a href="#">NM_198962.3</a>, <a href="#">NP_945200.1</a></p>
<b>RefSeq Size:</b>	<p>3728 bp</p>
<b>RefSeq ORF:</b>	<p>1383 bp</p>
<b>Locus ID:</b>	<p>387285</p>
<b>UniProt ID:</b>	<p><a href="#">P58308</a></p>
<b>Cytogenetics:</b>	<p>9 D</p>
<b>Gene Summary:</b>	<p>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]</p>