

## Product datasheet for **RG237277**

### MC2 receptor (MC2R) (NM\_001291911) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MC2 receptor (MC2R) (NM_001291911) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MC2 receptor
Synonyms:	ACTHR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237277 representing NM_001291911. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**

**ATGAAGCACATTATCAACTCGTATGAAAACATCAACAACACAGCAAGAAATAATCCGACTGTCCTCGT**  
GTGGTTTTGCCGGAGGAGATATTTTTACAATTTCCATTGTTGGAGTTTTGGAGAATCTGATCGTCCTG  
CTGGCTGTGTCAAGAATAAGAATCTCCAGGCACCCATGTACTTTTTCATCTGTAGCTTGGCCATATCT  
GATATGCTGGGCAGCCTATATAAGATCTTGAAAATATCCTGATCATATTGAGAAACATGGGCTATCTC  
AAGCCACGTGGCAGTTTTGAAACCACAGCCGATGACATCATCGACTCCCTGTTTGTCTCTCCCTGCTT  
GGCTCCATCTTCAGCCTGTCTGTGATTGCTGCGGACCGCTACATACCATCTCCACGCACTGCGGTAC  
CACAGCATCGTGACCATGCGCCGCACTGTGGTGGTGTTCACGGTCATCTGGACGTTCTGCACGGGGACT  
GGCATCACCATGGTGATCTTCTCCATCATGTGCCACAGTGATCACCTCACGTCGCTGTTCCCGCTG  
ATGCTGGTCTTCATCCTGTGCCTCTATGTGCACATGTTCTGCTGGCTCGATCCCACACCAGGAAGATC  
TCCACCTCCCCAGAGCCAACATGAAAGGGGCCATCACACTGACCATCCTGCTCGGGTCTTCATCTTC  
TGCTGGGCCCCCTTTGTGCTTCATGTCTTGTGATGACATTCTGCCCAAGTAACCCCTACTGCGCCTGC  
TACATGTCTCTTCCAGGTGAACGGCATGTTGATCATGTGCAATGCCGTCATTGACCCCTCATATAT  
GCCTTCGGAGCCCAGAGCTCAGGGACGCATTCAAAAGATGATCTTCTGCAGCAGGTA**CTGG**

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC



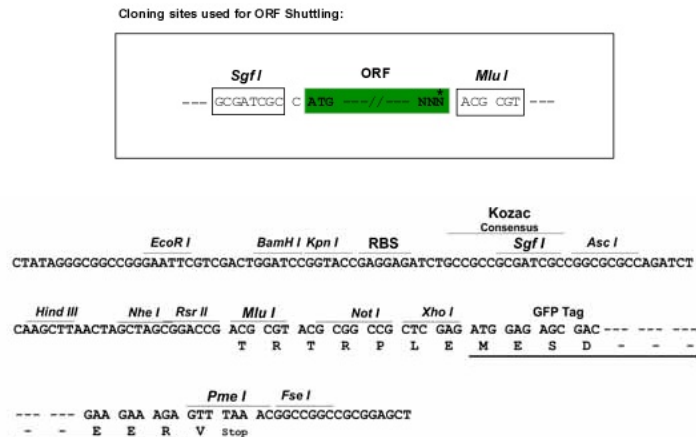
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG237277  
Blue=ORF Red=Cloning site Green=Tag(s)

MKHIINSYENINNTARNNSDCPRVVLPEEIFFTISIVGVLENLIVLLAVFKNKQLQAPMYFFICSLAIS  
DMLGSLYKILENLIILRNMGYLKPRGSFETTADDIIDLFLVLLGSLFSLSVIAADRYITIFHALRY  
HSIVTMRRTVVVLTVIWFCTGTGITMVF SHHVPTVITFTSLFPLMLVFI LCLVYHMFLLARSHTRKI  
STLPRANMKGAITLITLLGVFIFCWAPFVLHVLMTFCPSNPYCACYMSLFQVNGMLIMCNAVIDPFIY  
AFRSPELRDAFKKMI FCSRYW  
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
MGYGFYHFGTYP SGYENPFLHA INNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP  
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001291911

**ORF Size:** 891 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).

**RefSeq:** [NM\\_001291911.1](#), [NP\\_001278840.1](#)

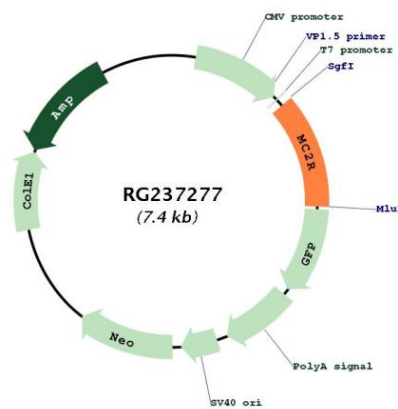
**RefSeq Size:** 3681 bp

**RefSeq ORF:** 894 bp

Locus ID: 4158  
 UniProt ID: [Q01718](#)  
 Cytogenetics: 18p11.21  
 Protein Families: Druggable Genome, GPCR, Transmembrane  
 Protein Pathways: Neuroactive ligand-receptor interaction  
 MW: 33.9 kDa

**Gene Summary:** MC2R encodes one member of the five-member G-protein associated melanocortin receptor family. Melanocortins (melanocyte-stimulating hormones and adrenocorticotrophic hormone) are peptides derived from pro-opiomelanocortin (POMC). MC2R is selectively activated by adrenocorticotrophic hormone, whereas the other four melanocortin receptors recognize a variety of melanocortin ligands. Mutations in MC2R can result in familial glucocorticoid deficiency. Alternate transcript variants have been found for this gene. [provided by RefSeq, May 2014]

### Product images:



Circular map for RG237277