

Product datasheet for **RC237277**

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:	Myc-DDK
Symbol:	MC2 receptor
Synonyms:	ACTHR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC237277 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCACATTATCAACTCGTATGAAAACATCAACAACACAGCAAGAAATAATCCGACTGTCCTCGTG
TGGTTTTGCCGGAGGAGATATTTTTACAATTTCCATTGTTGGAGTTTTGGAGAATCTGATCGTCTGCT
GGCTGTGTTCAAGAATAAGAATCTCCAGGCACCCATGTAATTTTTCATCTGTAGCTTGGCCATATCTGAT
ATGCTGGGCAGCCTATATAAGATCTTGAAAATATCCTGATCATATTGAGAAACATGGGCTATCTCAAGC
CACGTGGCAGTTTTGAAACCACAGCCGATGACATCATCGACTCCCTGTTTGTCTCTCCCTGCTTGGCTC
CATCTTCAGCCTGTCTGTGATTGCTGCGGACCGCTACATCACCATCTCCACGCACTGCGGTACACAGC
ATCGTGACCATGCGCCGCACTGTGGTGGTCTTACGGTCATCTGGACGTTCTGCACGGGGACTGGCATCA
CCATGGTGATCTTCTCCCATCATGTGCCACAGTGATCACCTTACGTCGCTGTTCCCGCTGATGCTGGT
CTTCATCTGTGCTCTATGTGCACATGTTCTGCTGGCTCGATCCCACACCAGGAAGATCTCCACCCTC
CCCAGAGCCAACATGAAAGGGGCCATCACACTGACCATCTGCTCGGGGTCTTTCATCTTCTGCTGGGCC
CCTTTGTGCTTCATGTCTCTTGATGACATTCTGCCAAGTAACCCCTACTGCGCTGCTACATGTCTCT
CTTCCAGGTGAACGGCATGTTGATCATGTGCAATGCCGTCATTGACCCCTCATATATGCCTTCCGGAGC
CCAGAGCTCAGGGACGCATTCAAAAAGATGATCTTCTGCAGCAGGTACTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC237277 protein sequence
 Red=Cloning site Green=Tags(s)

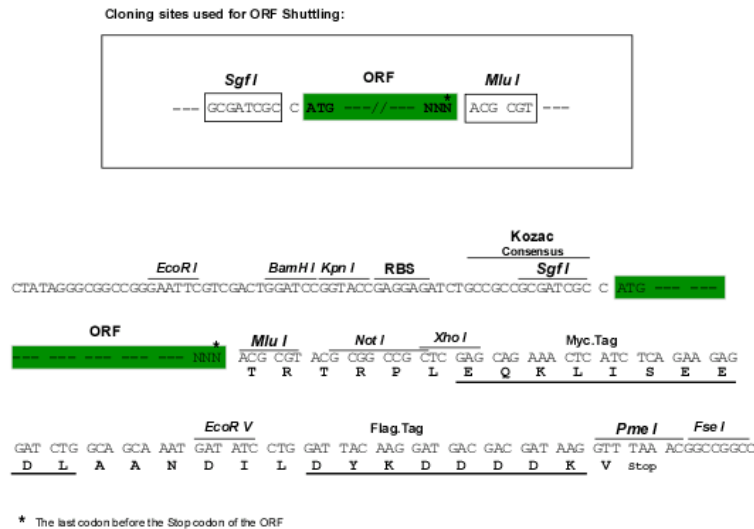
MKHIINSYENINNTARNNSDCPRVVLPEEIFFTISIVGVLENLIVLLAVFKNKNLQAPMYFFICSLAISD
 MLGSLYKILENILIILRNMGYLKPRGSFETTADDIIDLFLVLSLLGSIFSLSVIAADRYITIFHALRYHS
 IVTMRRTVVVLTVIWTFTGTGITMVIFSHHVPTVITFTSLFPLMLVFILCLYVHMFLLARSHTRKISTL
 PRANMKGAITLTILLGVFIFCWAPFVLHVLLMTFCPSNPYCACYMSLFQVNGMLIMCNAVIDPFIYAFRS
 PELRDAFKKMIFCSRYW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6071_b11.zip

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).

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_001291911.1](#), [NP_001278840.1](#)

RefSeq Size: 3681 bp

RefSeq ORF: 894 bp

Locus ID: 4158

UniProt ID: [Q01718](#)

Cytogenetics: 18p11.21

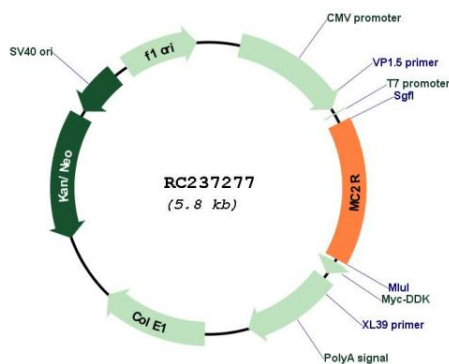
Protein Families: Druggable Genome, GPCR, Transmembrane

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 RC237277