

Product datasheet for RC211026

MC4 Receptor (MC4R) (NM_005912) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MC4 Receptor (MC4R) (NM_005912) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MC4 Receptor
Synonyms:	BMIQ20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211026 representing NM_005912 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGA^{ACTCCACCCACCGTGGGATGCACACTTCTCTGCACCTCTGGAACCGCAGCAGTTACAGACTGC}
ACAGCAATGCCAGT**GAGTCCCTTGGAAAAGGCTACTCTGATGGAGGGTGTACGAGCAACTTTTTGTCTC**
TCCTGAGGTGTTTGTGACTCTGGGTGCATCAGCTTGTGGAGAATATCTTAGTGATTGTGGCAATAGCC
AAGAACAAGAATCTGCATTCACCCATGTACTTTTTCATCTGCAGCTTGGCTGTGGCTGATATGCTGGTGA
GCGTTTTCAAATGGATCAGAAACCATTGTCATCACCTATTAACAGTACAGATACGGATGCACAGAGTTT
CACAGTGAATATTGATAATGTCATTGACTCGGTGATCTGTAGCTCCTTGCTTGCATCCATTTGCAGCCTG
CTTTCAATTGCAGTGGACAGGTA^{CTTTACTATCTTCTATGCTCTCCAGTACCATAACATTATGACAGTTA}
AGCGGGTGGGATCATCATAAGTTGTATCTGGGCAGCTTGACCGTTTCAGGCATTTTGTTCATCATTTA
CTCAGATAGTAGTGCTGTATCTGCCTCATCACCATGTTCTTACCATGCTGGCTCTCATGGCTTCT
CTCTATGTCCACATGTTCTGATGGCCAGGCTTACATTAAGAGGATTGCTGTCTCCCGGCACTGGTG
CCATCCGCCAAGGTGCCAATATGAAGGGAGCGATTACCTTGACCATCCTGATTGGCGTCTTTGTTGTCTG
CTGGGCCCCATTCTTCTCCACTTAATATTCTACATCTCTGTCCCTCAGAATCCATATTGTGTGTCTTC
ATGTCTCACTTTAACTTGTATCTCATACTGATCATGTGTAATTCATCATCGATCCTCTGATTTATGCAC
TCCGGAGTCAAGAACTGAGGAAAACCTTCAAAGAGATCATCTGTTGCTATCCCCTGGGAGGCCTTTGTGA
CTTGTCTAGCAGATAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC211026 representing NM_005912
Red=Cloning site Green=Tags(s)

MVNSTHRGMHTSLHLWNRSSYRLHSNASESLGKGYSDGGCYEQLFVSPEVFVTLGVISLLENILVIVAIA
 KNKNLHSPMYFFICSLAVADMLVSVSNGSETIVITLLNSTDTDAQSFTVNIDNVIDSVICSSLLASICSL
 LSIADVRYFTIFYALQYHNIMTVKRVGIIISCIWAACVSGILFIIYSDSSAVIICLITMFFTMLALMAS
 LYVHMFLMARLHIKRIAVLPGTGAIHQGANMKGAITLTILIGVFVVCWAPFFLHLIFYISCPQNPYCVCF
 MSHFNLYLILIMCNSIIDPLIYALRSQELRKTKEIICCYPLGGLCDLSSRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2339_d12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005912

ORF Size: 996 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005912.3](#)

RefSeq Size: 999 bp

RefSeq ORF: 999 bp

Locus ID: 4160

UniProt ID: [P32245](#)

Cytogenetics: 18q21.32

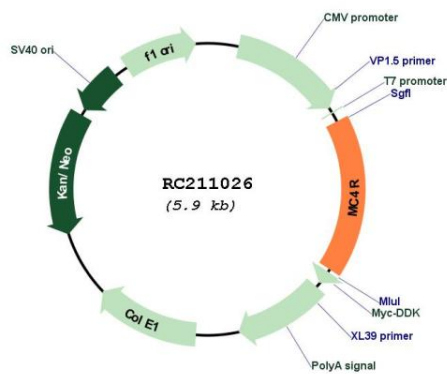
Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

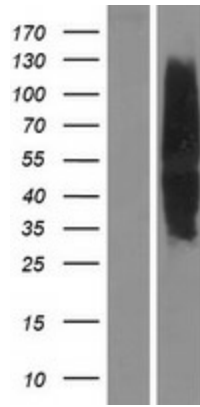
MW: 36.8 kDa

Gene Summary: The protein encoded by this gene is a membrane-bound receptor and member of the melanocortin receptor family. The encoded protein interacts with adrenocorticotropic and MSH hormones and is mediated by G proteins. This is an intronless gene. Defects in this gene are a cause of autosomal dominant obesity. [provided by RefSeq, Jan 2010]

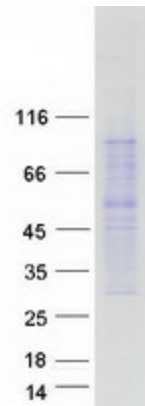
Product images:



Circular map for RC211026



Western blot validation of overexpression lysate (Cat# [LY401792]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211026 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MC4R protein (Cat# [TP311026]). The protein was produced from HEK293T cells transfected with MC4R cDNA clone (Cat# RC211026) using MegaTran 2.0 (Cat# [TT210002]).