

Product datasheet for MR224071

Mc3r (NM_008561) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mc3r (NM_008561) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mc3r
Synonyms:	MC3-R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224071 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACTTTCCTGCTGCCTGTCTTCTGTTTCTCCGATGCTGCCTAACCTCTCTGAGCACCTGCAGCCC
CTCCTGCCAGCAACCGGAGCGGCAGTGGTTCTGTGAGCAGGTCTTCATCAAGCCGGAGGTCTTCTGCG
TCTGGGCATCGTCAGTCTGATGGAAAACATCCTGGTGATCCTGGCTGTGGTCAGGAATGGCAACCTGCAC
TCTCCCATGTACTTCTTCTGTGCAGCCTGGCTGCAGCCGACATGCTGGTGAGCCTGTCCAACCTCCCTGG
AGACCATCATGATCGCCGTGATCAACAGCGACTCCCTGACCTTGGAGGACCAGTTTATCCAGCACATGGA
TAATATCTTCGACTCTATGATTTGCATCTCCCTGGTGGCCTCCATCTGCAACCTCCTGGCCATTGCCATC
GACAGGTACGTCACCATCTTCTATGCCCTTCGGTACCACAGCATCATGACAGTGAGGAAAGCCCTCACCT
TGATCGGGGTATCTGGGTCTGCTGCGGCATCTGCGGCGTGATGTTTCATCATCTACTCCGAGAGCAAGAT
GGTCATCGTGTGTCTCATCACCATGTTCTTCGCCATGGTGCTCCTCATGGGCACCCTATATATCCACATG
TTCCTCTTCGCCAGGCTCCACGTCCAGCGCATCGCAGTGTGCCCTGCTGGCGTGGTGGCCCCACAGC
AGCACTCCTGCATGAAGGGGGTGTACCATCACTATCCTGCTGGGTGTTTTTCATCTTCTGCTGGGCGCC
TTTCTTCTCCACCTGGTCTCATCATCACCTGCCCCACCAATCCCTACTGCATCTGCTACACGGCCCAT
TTCAACACCTACCTGGTTCTCATCATGTGCAACTCCGTATCGACCCCTCATCTACGCCCTCCGCAGCC
TGGAGCTGCGCAACACGTTCAAGGAGATTCTCTGCGGCTGCAACAGCATGAACTTGGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR224071 protein sequence
Red=Cloning site Green=Tags(s)

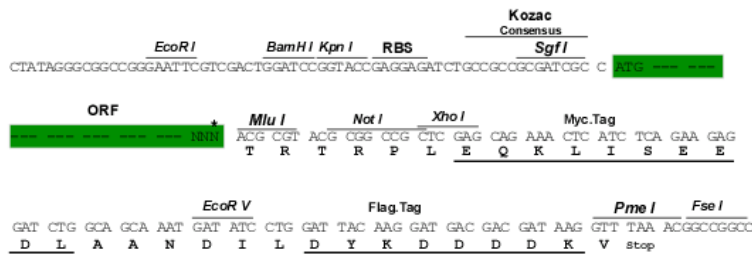
MNSSCCLSSVSPMLPNLSEHPAAPPASNRSGSGFCEQVFIKPEVFLALGIVSLMENILVILAVVRNGLH
 SPMYFFLCSLAAADMLVLSNSLETIMIIVINSDSL TLEDQFIQHMDNIFDSMICISLVASICNLLAIAI
 DRYVTIFYALRYHSIMTVRKAL TLIGVIWVCCGICGVMFIIYSESKMVI VCLITMFFAMVLLMGTLYIHM
 FLFARLHVQRIAVLPPAGVVAPQQHSCMKGAVTITILLGVFIFCWAPFFLHLVLIITCPTNPYICICYTAH
 FNTYLVLIMCNSVIDPLIYAFRSLELRNTFKEILCGCNSMNLG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_008561

ORF Size: 972 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_008561.3](#), [NP_032587.1](#)

RefSeq Size: 2623 bp

RefSeq ORF: 972 bp

Locus ID: 17201

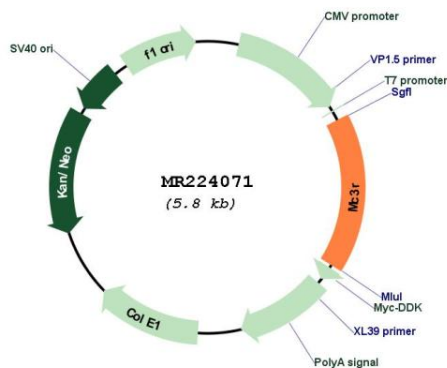
UniProt ID: [P33033](#)

Cytogenetics: 2 94.8 cM

MW: 35.8 kDa

Gene Summary: This gene encodes a member of the melanocortin receptor family. Melanocortin receptors are transmembrane G-protein coupled receptors, which respond to small peptide hormones and exhibit diverse functions and tissue type localization. As part of the central nervous melanocortin system, the encoded protein is competitively bound by either melanocyte stimulating hormone or agouti-related protein to regulate energy homeostasis and adaptation to food restriction. Disruption of this gene results in an increased ratio of weight gain to food intake, increased fat mass, and decreased lean mass, without having a large effect on insulin sensitivity or glucose metabolism. [provided by RefSeq, Dec 2012]

Product images:



Circular map for MR224071