

Product datasheet for **RR210706**

Mgrn1 (NM_001013964) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mgrn1 (NM_001013964) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mgrn1
Synonyms:	RGD1311862
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR210706 representing NM_001013964
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCTCCATCCTGAGTCGCCGCATCGCGGGCGTGGAGGACATCGACATTCAGGCCAACTCGGCCATC
 GTTACCCTCCGAAGTCCGCAGGAACTACTTTGCTTCGCACTTTTTCATGGGAGGAGAGAAGTTTGACAC
 TCCCCATCCTGAAGGTTACCTCTTTGGCGAGAACATGGACCTGAACCTTCCTGGGTAGTCGTCAGTCCAG
 TTCCCCTATGTCACCCCTGCCCCCATGAGCCAGTGAAGACACTCAGGAGCCTGGTAAACATTCGCAAAG
 ACTCTCTCCGGCTGGTGAAGTACAAAGATGACACAGACAGCCCCACAGAGGACGGCGAGAAGCCCCGCGT
 GCTCTACAGTCTGGAATTCACCTTTGATGCTGATGCCCGTGTGGCTATCACCATTATTGCCAGGCAGTG
 GAGGAGTTGTCAACGGCATGACGGTGTACAGCTGAAGAACCCTTCTCTGCAATCTGAGACTGTCCATT
 ACAAGAGAGGCGTTAGCCAGCAGTTCTCCCTGCCTTCTTCAAGATTGACTTCTCCGAGTGAAGGATGA
 TGAGCTGAACTTTGACCTGGACCGGGTGTGTTCCAGTAGTCATCCAGGCTGTGGTGGATGAAGGAGAT
 GTTGTGGAAGTACTGGCCACGCTCATGTGCTCTTGGCTGCCTTTGAGAAGCACGTGGATGGCAGCTTCT
 CCGTGAAGCCATTAAGCAGAAGCAAATTTGGACCGGGTCAGCTACCTGCTGCAAGAGATCTACGGCAT
 TGAGAACAAGAACAACCAGGAGACTAAGCCTTCCGACGATGAGAACAGTGACAACAGCAGTGAGTGTGTG
 GTGTGCCCTGTGACTTGGCGGACACGCTAATCCTGCCCTGCCGCCACTTGTGCCCTGCACTTCTGTG
 CTGACACGCTGCGGTACCAGGCCAACTGCCCATCTGCCGGTGCCTTCCGAGCTCTCTACAGAT
 CCGGGCTGTACGGAAGAAGCCAGGAGCTGTCTCCATCTCCTCAGTCTGTCTTGGCCAAAGTGTG
 GACCACGATGAACACTCTAATTCTGACAGTGTCCACCTGGCTATGAGCCATCTCCTTGGCCAAAGTGTG
 TCAATGGACTACGGGCTGTCTCCCGGCTATCCCATCAGCTCCCCTCTATGAGGAAATCACCTCAGGAC
 CATCTCGGACGGTCTTCCAGGCGAGTGTCCCCTTGTGACTCGATCGAATCATAGAAAATGGAATA
 CAGAAGGGCAAGACACAGAGCAAGTCTCCAGACAGCACCCCTGCGGTCTCCATCATCTCCATTATGAGG
 AGGATGAGGAGAAGTCTCAGAGGACCCGGAGGCTCCTCTCCACCAAGCGGTGTGGAGCTCGTGTCTCA
 GGAGAGCAGTCCCCTGAGAGTTTCGGAACAGAGGAGGTGGTGAGCCATCCCTAAAGCAAGGAAGCCGA
 GTACCCTCTATTGATGATGCTCCTGCAGGATGGCAGTCCCAGCATCATGGTTGCAGCCAGCCAGTCCCTC
 CTGCTGACATCTACCTACCAGCCCTGGTCTGAGTCGTGCTCTGTTGGTATAGAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR210706 representing NM_001013964
 Red=Cloning site Green=Tags(s)

MGSILSRRIAGVEDIDIQANSAYRYPKSAAGNYFASHFFMGGEKFDTPHPEGYLFGENMDLNFLGSRPVQ
 FPYVTPAPHEPVKTLRSLVNIRKDSLRLVRYKDDTDSPTEDGEKPRVLYSLEFTFDADARVAITIIYQAV
 EEFVNGMTVYSCKNPSLQSETVHYKRGVSQQFSLPSFKIDFSEWKDELNFDLDRGVFPVVIQAVVDEGD
 VVEVTGHAHVLLAAFEKHVDGFSVKPLKQKQIVDRVSYLLQEIIYGIENKNNQETKPSDDENSNSSECV
 VCLSDLRDTLILPCRHLCLCTSCADTLRYQANNCPIRLPFRALLQIRAVRKKPGALSPIISFSPVLAQSV
 DHDEHSNSDSVPPGYEPIISLLEALNGLRAVSPAIPSAPLYEEIITYSGISDGLSQASCPLAGLDRIIENGI
 QKGKTQSKSPDSTLRSPSSPIHEEDEEKLSEDPEAPLPPSGVELVLQESSPEFSGTEEVGEPVSLKQGSR
 VPSIDDLVLDGSPQHHGCSQPVPADIYLPALGPESCSVGIIE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001013964

ORF Size: 1599 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_001013964.1](#), [NP_001013986.1](#)

RefSeq Size: 2287 bp

RefSeq ORF: 1602 bp

Locus ID: 302938

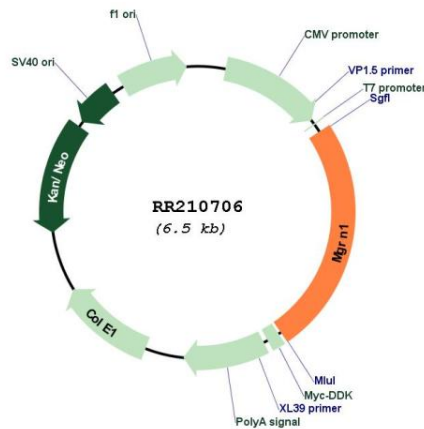
UniProt ID: [Q5XIQ4](#)

Cytogenetics: 10q12

MW: 58.6 kDa

Gene Summary: E3 ubiquitin-protein ligase. Mediates TSG101 monoubiquitination at multiple sites. Plays a role in the regulation of endosome-to-lysosome trafficking. Impairs MC1R- and MC4R-signaling by competing with GNAS-binding to MCRs and inhibiting agonist-induced cAMP production. Does not inhibit ADRB2-signaling. Does not promote MC1R ubiquitination. Acts also as a negative regulator of hedgehog signaling (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR210706