

Product datasheet for **RR210173**

Hmgcs2 (NM_173094) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hmgcs2 (NM_173094) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hmgcs2
Synonyms:	Hmgcs1; Mt3h3mg
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR210173 representing NM_173094
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCACGGCTTTTGGCTCCAGCAAGGCGGGTCTGCAAGTGAAGAGAGTGATGCAGGAATCTTCGCTCT
 CACCCGCTCACCTGCTCCCCGACGCCAGCAGAGGTTTTCTACAATCCCTCTGCTCCCCGGCCAAAAC
 TGATACATGGCCAAAAGATGTGGGCATCCTTGCCTGGAGGTCTACTTTCCAGCCCAATATGTGGACCAA
 ACTGACCTGGAGAAGTTCAACAATGTGGAAGCAGGGAAGTACACAGTGGGCTTGGCCAGACCCGTATGG
 GCTTCTGTTGGTCCAGGAGGACATCAACTCCCTGTGCCTCACAGTGGTGCAGAGGCTGATGGAACGCAC
 AAAGCTGCCATGGGATGCCGTAGGCCGCTGGAAGTGGGCACGGAAACCATATTGACAAGTCCAAGGCT
 GTCAAGACAGTGTCTATGGAGCTTCCAGGATTCAGGCAACACTGACATCGAGGGCATAGATACCACCA
 ACGCCTGTATGGTGGCACTGCCTCCCTCTTCAACGCTGCCAACTGGATGGAGTCCAGCTACTGGGATGG
 TCGCTATGCCCTGGTGGTCTGTGGTGTATCGCAGTCTACCCAAGTGGTAACGCCCGCCCCACAGGTGGT
 GCCGGGGCTGTGGCAATGCTGATTGGGCCAAGGCCCGCTAGTCTGGAACAAGGGCTGAGGGGAACCC
 ACATGGAGAACGCCTATGACTTCTACAAACCAAACCTTGGCCTCAGAGTATCCACTGGTGGATGGGAAGCT
 GTCTATCCAGTGTACTCTGCGGGCTTGGACCGATGCTATGCAGCTTACCGCAGGAAAATCCAGAATCAG
 TGGAAAGCAAGCTGGAACAACACGCTTTCACCCTCGATGACGTGCAATATATGATCTTCCACACACCCCT
 TTTGCAAGATGGTCCAGAAATCCCTAGCTCGGCTGATGTTCAATGACTTCTGTGATCTAGCAGTGACAA
 GCAGAACAACCTTATACAAGGGTCTAGAGGCTTCAAGGGTCTAAAGCTGGAAGAAACCTACACCAACAAG
 GATGTTGACAAGGCTCTGCTGAAGGCTCCCTGGACATGTTCAACAAGAAAACCAAGGCTCCCTTTACC
 TCTCCACAAAACAAATGGGAACATGTACACCTCGTCCCTACGGGTGCCTGGCCTCACTTCTCTCCACCA
 CTCTGCCCAAGAATTGGCCGGCTCCAGGATTGGAGCATTCTCTACGGCTCAGGCTTAGCAGCAAGTTTC
 TTCTATTTCGAGTGTCCAAGGACGCTTCCCCAGGTTCCCTCTGGAGAAGCTGGTGTCTAGTGTGTGAG
 ATCTGCCCAAACGTCTAGACTCCCGGAGACGATGTCCTGAGGAATTCACAGAAATAATGAATCAGAG
 AGAGCAATTTTACCACAAGGTGAACCTTCTCTCCCTGGTACACAAGCAACCTTCTCCAGGCACTTGG
 TACCTTGAACGAGTGGATGAGATGCACCGCAGAAAATATGCCCGGCTCCCGTC

**ACGGTACGGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence:

>RR210173 representing NM_173094
 Red=Cloning site Green=Tags(s)

MQRLLAPARRVLQVKRVMQESSLSPAHLLPAAQRFSTIPPAPLAKTDTWPKDVGILALEVYFPAQYVDQ
 TDLEKFNVEAGKYTVGLGQTRMGFCSVQEDINSLCLTVVQRLMERTKLPWDAVGRLEVGTETIIDKSKA
 VKTVLMELFQDSGNTDIEGIDTTNACYGGTASLFNAANWMESSYWDGRYALVCGDIAVYPSGNARPTGG
 AGAVAMLIGPKAPLVLEQGLRGTHMENAYDFYKPNLASEYPLVDGKLSIQCYLRALDRCYAAYRRKIQNQ
 WKQAGNNQPFLLDDVQYMFHTPFCKMVQKSLARLMFNDFLSSSSDKQNNLYKGLEAFKGLKLEETYTNK
 DVDKALLKASLDMFNKTKASLYLSTNNGNMYTSSLYGCLASLLSHSAQELAGSRIGAFSYGSGLAASF
 FSFRVSKDASPGSPLEKLVSSVSDLPKRLDSRRRMSPEEFTEIMNQREQFYHKVNFSPPGDTSNLFPGTW
 YLERVDEMHRRYARRPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

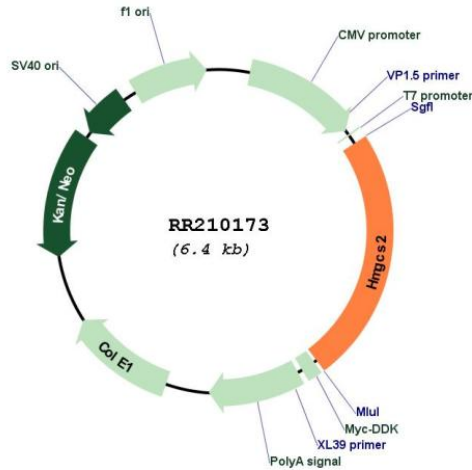
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_173094

ORF Size: 1524 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_173094.2](#), [NP_775117.2](#)

RefSeq Size: 2007 bp

RefSeq ORF: 1527 bp

Locus ID: 24450

UniProt ID: [Q68G44](#)

Cytogenetics: 2q34

MW: 56.9 kDa

Gene Summary: HMG-CoA cycle enzyme that catalyzes a step in ketone-body biosynthesis [RGD, Feb 2006]