

Product datasheet for **SC327023**

HMGS2 (NM_001166107) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HMGS2 (NM_001166107) Human Untagged Clone
Tag:	Tag Free
Symbol:	HMGS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC327023 representing NM_001166107. Blue=Insert sequence Red=Cloning site Green=Tag(s)

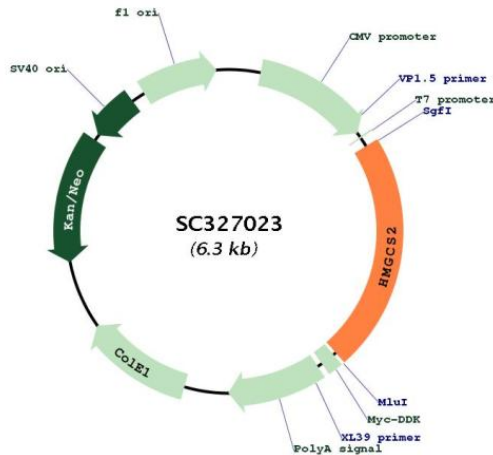
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Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001166107

Insert Size: 1401 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001166107.1](#)

RefSeq Size: 2351 bp

RefSeq ORF: 1401 bp

Locus ID: 3158

UniProt ID: [P54868](#)

Cytogenetics:	1p12
Protein Families:	Druggable Genome
Protein Pathways:	Butanoate metabolism, Metabolic pathways, PPAR signaling pathway, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Valine, leucine and isoleucine degradation
MW:	52.5 kDa
Gene Summary:	<p>The protein encoded by this gene belongs to the HMG-CoA synthase family. It is a mitochondrial enzyme that catalyzes the first reaction of ketogenesis, a metabolic pathway that provides lipid-derived energy for various organs during times of carbohydrate deprivation, such as fasting. Mutations in this gene are associated with HMG-CoA synthase deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Oct 2009]</p> <p>Transcript Variant: This variant (2) is missing an in-frame coding exon compared to variant 1. This results in a shorter isoform (2) lacking an internal protein segment compared to isoform 1.</p>