

Recombinant HMGCR, Catalytic Domain

Catalog # FL129

Product Specifications

Appearance	Sterile colorless liquid.
Purity	> 95% by SDS-PAGE under reducing conditions.
Endotoxin	< 0.5 EU/μg of rHuHMGR protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Human
Tag	C-terminal Flag Tag
Concentration	No less than 10mg/ml, The concentration for a specific batch as shown in the COA
Formulation	A 0.2 μm filtered concentrated solution in 10 mM PB, with 50% (v/v) Glycerol, 2.5 mM DTT, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile aqueous buffer to an appropriate concentration. Stock solutions should be aliquoted into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	P04035 Glu340-Ala888 with a C-terminal flag tag
Amino acid sequence	<pre>EQTETESTLSLKNPITSPVVTQKKVPDNCRRREPMLVRNNQKCDSEVEETGINRERKVEVIKPLVAETDTPNRATFVVGNSSL LDTSSVLVTQEPEIELPREPRNNEECLQILGNAEKGAKFLSDAEIQLVNAKHIPAYKLETLMETHERGVSIIRQLLSKLESEPS SLQYLPYRDYNYSLVMGACCENVIGYMPIPVGVAGPLCLDEKEFQVPMATTEGCLVASTNRGCRAIGLGGGASSRVLADGM TRGPVVRPLPRACDSAIEVKAWLETSEGFVAVIKEAFDSTSRFARLQKLHTSIAGRNLRYRFSRSGDAMGMNMISKGTAKALS LHEYFPEMQILAVSGNYCTDKKPAAINWIEGRGKSVVCEAVIPAKVVREVLKTTTEAMIEVNINKNLVGSAMAGSISGGYNAH AANIVTAIYIACGQDAAQNVGSSNCITLMEASGPTNEDLYISCTMPSIEIGTVGGGTNLLPQQACLQMLGVQGACKDNPGE NARQLARIVCGTVMAGELSLMAALAAGHLVKSHMIHNRSKINLQDLQGAETKKTAGGGSYKDDDDK</pre>
Molecular weight	Approximately 60.4 kDa, a single non-glycosylated polypeptide chain containing 560 amino acids.
Synonyms	HMG-CoA reductase
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 6 to 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant HMGCR, Catalytic Domain is for research use only and not for use in diagnostic or therapeutic procedures.

Background

3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMGCR) Catalyzes the conversion of (3S)-hydroxy-3-methylglutaryl-CoA (HMG-CoA) to mevalonic acid, the rate-limiting step in the synthesis of cholesterol and other isoprenoids, thus plays a critical role in cellular cholesterol homeostasis. HMGCR is the main target of statins, a class of cholesterol-lowering drugs. Inhibition of HMGCR in the liver stimulates the LDL-receptors, which results in an increased clearance of LDL from the bloodstream and a decrease in blood cholesterol levels. The first result can be seen after one week of statin use and the effect is maximal after four to six weeks. Recombinant human HMGR is a 60.4kDa protein containing 560 amino acid.

