

Recombinant Human HMGCR Protein, GST-tagged

Cat. No. HMGCR-028H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant N-terminal GST-tagged human HMGCR protein (426-888) was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	426-888
Description	HMG-CoA reductase is the rate-limiting enzyme for cholesterol synthesis and is regulated via a negative feedback mechanism mediated by sterols and non-sterol metabolites derived from mevalonate, the product of the reaction catalyzed by reductase. Normally in mammalian cells this enzyme is suppressed by cholesterol derived from the internalization and degradation of low density lipoprotein (LDL) via the LDL receptor. Competitive inhibitors of the reductase induce the expression of LDL receptors in the liver, which in turn increases the catabolism of plasma LDL and lowers the plasma concentration of cholesterol, an important determinant of atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Molecular Mass	76.5 kDa
Purity	≥85% estimated by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme required to convert 1 μmol of NADPH to

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

NADP+ per minute at 37 centigrade in 20 mM sodium phosphate, pH 6.5, 100 mM sodium chloride, and 10 mM DTT, containing 300 μM (R,S)-HMG-CoA and 300 μM NADPH.

Stability ≥ 6 months

Storage At -80 centigrade.

Storage Buffer 50 mM Tris, pH 8.0, with 300 mM sodium chloride and 20% glycerol

GENE INFORMATION

Gene Name [HMGCR 3-hydroxy-3-methylglutaryl-CoA reductase \[Homo sapiens \(human\) \]](#)

Official Symbol [HMGCR](#)

Synonyms HMGCR; 3-hydroxy-3-methylglutaryl-CoA reductase; LDLCQ3; 3-hydroxy-3-methylglutaryl-Coenzyme A reductase; 3-hydroxy-3-methylglutaryl CoA reductase (NADPH); HMG-CoA reductase; hydroxymethylglutaryl-CoA reductase; EC 1.1.1.34

Gene ID [3156](#)

mRNA Refseq [NM_000859](#)

Protein Refseq [NP_000850](#)

MIM [142910](#)

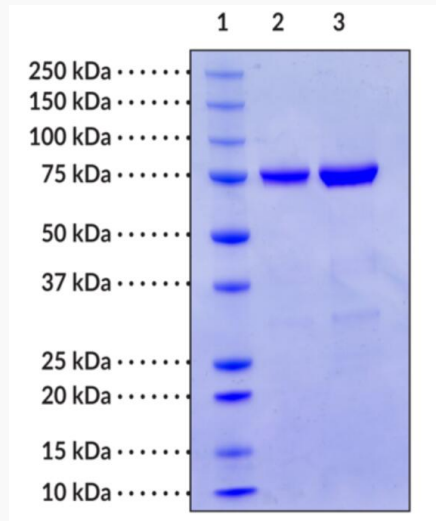
UniProt ID [P04035](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**SDS-PAGE analysis
of HMGCR**



Lane 1: MW Markers

Lane 2: HMG-CoA Reductase (2 µg)

Lane 3: HMG-CoA Reductase (4 µg)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA