

## Recombinant Human HMGCR Protein, GST-tagged

Cat. No. HMGCR-016H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human HMGCR protein (426-888) with a N-terminal GST-tag was expressed in E.coli
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	426-888
<b>Description</b>	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.
<b>Molecular Mass</b>	76.5 kDa
<b>Purity</b>	≥85% estimated by SDS-PAGE
<b>Unit Definition</b>	One unit is defined as the amount of enzyme required to convert 1 μmol of NADPH to

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

**Stability**

≥ 2 years

**Storage**

-80 centigrade

**Storage Buffer**

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

**Shipping**

Dry ice in continental US, may vary elsewhere.

## 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

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