

# Recombinant Human HMGCR cell lysate

**Cat. No.** HMGCR-802HCL    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species</b>        | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <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>Size</b>           | 100 ul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Storage Buffer</b> | 1X Sample Buffer (50 mM Tris-HCl, 2% SDS, 10% glycerol, 300 mM 2-mercaptoethanol, 0.01% Bromophenol blue)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>   | Western Blot;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## GENE INFORMATION

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| <b>Gene Name</b> | HMGCR 3-hydroxy-3-methylglutaryl-CoA reductase [ Homo sapiens ] |
|------------------|-----------------------------------------------------------------|

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

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

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Official Symbol</b>     | HMGCR                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>            | HMGCR; 3-hydroxy-3-methylglutaryl-CoA reductase; 3 hydroxy 3 methylglutaryl Coenzyme A reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A reductase; 3 hydroxy 3 methylglutaryl CoA reductase (NADPH); hydroxymethylglutaryl CoA reductase; HMG-CoA reductase; hydroxymethylglutaryl-CoA reductase; 3-hydroxy-3-methylglutaryl CoA reductase (NADPH); LDLCQ3;                                                                             |
| <b>Gene ID</b>             | <a href="#">3156</a>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>mRNA Refseq</b>         | <a href="#">NM_000859</a>                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Protein Refseq</b>      | <a href="#">NP_000850</a>                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>UniProt ID</b>          | <a href="#">P04035</a>                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Chromosome Location</b> | 5q13.3-q14                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Pathway</b>             | Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; C5 isoprenoid biosynthesis, mevalonate pathway, organism-specific biosystem; C5 isoprenoid biosynthesis, mevalonate pathway, conserved biosystem; Cholesterol Biosynthesis, organism-specific biosystem; Cholesterol biosynthesis, organism-specific biosystem; Fatty acid, triacylglycerol, and ketone body metabolism, organism-specific biosystem; |
| <b>Function</b>            | NADP binding; hydroxymethylglutaryl-CoA reductase (NADPH) activity; oxidoreductase activity;                                                                                                                                                                                                                                                                                                                                            |