



# Human Hydroxymethylglutaryl CoA Reductase (HMG-CoAR) ELISA kit

<b>Product Code</b>	CSB-E15964h
<b>Protein Biological Process 2</b>	Lipogenesis and lipometabolism
<b>Abbreviation</b>	HMGCR
<b>Protein Biological Process 1</b>	Biosynthesis/Metabolism
<b>Target Name</b>	3-hydroxy-3-methylglutaryl-Coenzyme A reductase
<b>Uniprot No.</b>	P04035
<b>Alias</b>	LDLCQ3, 3-hydroxy-3-methylglutaryl CoA reductase (NADPH) hydroxymethylglutaryl-CoA reductase
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Protein Biological Process 3</b>	Cholesterol biosynthesis
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	0.78 ng/mL- 50 ng/mL
<b>Sensitivity</b>	0.195 ng/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Metabolism
<b>Gene Names</b>	HMGCR
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Description</b>	This Human HMGCR ELISA Kit was designed for the quantitative measurement of Human HMGCR protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.78 ng/mL- 50 ng/mL and the sensitivity is 0.195 ng/mL .
<b>Target Details</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.

#### Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

#### Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human HMG-CoAR in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
	Average %	95
1:1	Range %	92-100
	Average %	91
1:2	Range %	82-96
	Average %	95
1:4	Range %	87-100
	Average %	87
1:8	Range %	82-98

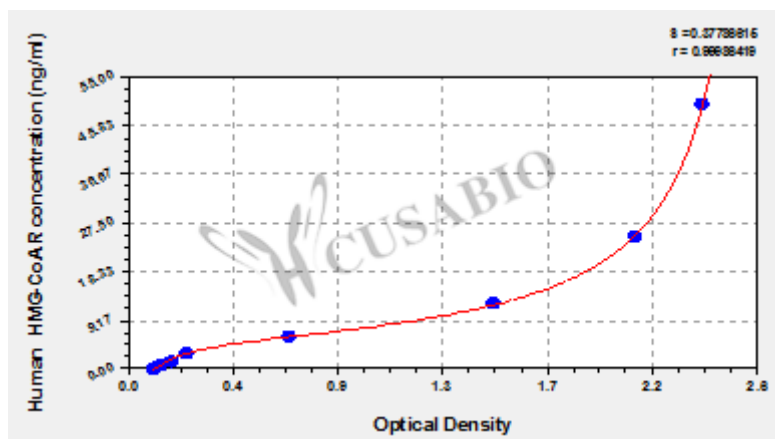
#### Recovery

The recovery of HMG-CoAR spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	96	91-101
EDTA plasma (n=4)	90	82-97

#### Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
50	2.325	2.450	2.388	2.271
25	2.050	2.174	2.112	1.995
12.5	1.476	1.563	1.520	1.403
6.25	0.659	0.697	0.678	0.561
3.12	0.245	0.261	0.253	0.136
1.56	0.192	0.186	0.189	0.072
0.78	0.151	0.140	0.146	0.029
0	0.120	0.113	0.117	?

## Msds

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