

Product Information

MemDX™ Membrane Protein Human HMGCR (3-hydroxy-3-methylglutaryl-CoA reductase)

Full Length

Cat. No.: **MPC1354K**

This product is for research use only and is not intended for diagnostic use.

This product is a 97.4 kDa Human HMGCR membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

HMGCR

Protein Length

Full length

Protein Class

Oxidoreductase

Molecular Weight

97.4 kDa

TMD

8

Sequence

MLSR LFRMHGLFVASHPW EVIVGT VTLTICMMSMN MFTGNNKICGWNYEC
PKFEEDVLSSDIITITRCIA ILYIFQFQNL RQLGSKYILGIAGLFTI
FSSFVFSTVVIHFLDKELTGLNEALPFFLL LIDL SRASTLAKFALSSNSQ
DEVRENIARGMAILGPTFTLDALVECLVIGVGTMSGVRQLEIMCCFGCMS
VLANYFVFMTFFPACVSLVLELSRESREGRPIWQLSHFARVLEEEENKPN
PVTQRVKMIMSLGLVLVHAHSRWIADPSPQNSTADTSKVS LGLDENVSKR
IEPSVSLWQFYLSKMISM DIEQVITLSLALLLAVKYIFFEQTETESTLSL
KNPITSPVVTQKKVPDNCCRREPM LVRNNQKCDSVEEETGINRERKVEVI
KPLVAETDTPNRATFVVGNSSLLDTSSVLVTQEPEIELPREPRPNEECLQ
ILGNAEKGAKFLSDAEIIQLVNAKHIPAYKLETLMETHERGV SIRRQLLS
KKLSEPSLQYLPYRDYNSLVMGACCENVIGYMPIPVGVAGPLCLDEKE
FQVPMATTEGCLVASTNRGCRAIGLGGGASSRVLADGMTRGPVVR LPRAC
DSAEVKAWLETSEGF AVIKEAFDSTSRFARLQKLHTSIAGRNL YIRFQSR
SGDAMGMNMISKGTEKALSKLHEYFPEMQILAVSGNYCTDKKPAAINWIE
GRGKS VVCEAVIPAKVVREVLKTTTEAMIEVNINKNLVGSAMAGSIGGYN
AHAANIVTAIYIACGQDAAQNVGSSNCITLMEASGPTNEDLYISCTMP SI
EIGTVGGGTNLLPQQACLQMLGVQGACKDNPGENARQLARIVCGTVMAGE
LSLMAALAAGHLVKSHMIHNRSKINLQDLQGACTKKTA

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

HMGCR

Full Name

3-hydroxy-3-methylglutaryl-CoA reductase

Introduction

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.

Alternative Names

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

Gene ID

[3156](#)

UniProt ID

[P04035](#)