

# **Product Information**

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

Expressed in *E.coli* with 6xHis tag at the N-terminus for Antibody Discovery, Partial (588-887aa)

Cat. No.: MPX4238K

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

This product is a 36.0kDa Human HMGCR membrane protein expressed in *E.coli*. 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** 

Partial (588-887aa)

**Protein Class** 

Oxidoreductase

**Molecular Weight** 

36.0kDa

**TMD** 

8

# Sequence

MTRGPVVRLPRACDSAEVKAWLETSEGFAVIKEAFDSTSRFARLQKLHTSIAGRNLYIRFQSRSGDAMGMNMISKGTEKALSKLHE

## **Product Description**

# **Expression Systems**

E.coli

Tag

6xHis tag at the N-terminus

**Protein Format** 

Soluble

#### **Form**

Liquid or Lyophilized powder

## **Purity**

>90% as determined by SDS-PAGE

#### **Buffer**

Tris-based buffer, 50% glycerol

### 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