ARG57991
anti-HMGCR antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HMGCR
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HMGCR
Species	Human
Immunogen	Synthetic peptide derived from Human HMGCR.
Conjugation	Un-conjugated
Alternate Names	LDLCQ3; 3-hydroxy-3-methylglutaryl-coenzyme A reductase; EC 1.1.1.34; HMG-CoA reductase

Application Instructions

Application table

Application	Dilution
IP	1:50
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Jurkat
Observed Size	~ 98 kDa

Properties

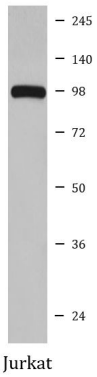
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	HMGCR
Gene Full Name	3-hydroxy-3-methylglutaryl-CoA reductase
Background	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. [provided by RefSeq, Aug 2008]
Function	Transmembrane glycoprotein that is the rate-limiting enzyme in cholesterol biosynthesis as well as in the biosynthesis of nonsterol isoprenoids that are essential for normal cell function including ubiquinone and geranylgeranyl proteins. [UniProt]
Calculated Mw	97 kDa
PTM	N-glycosylated. Deglycosylated by NGLY1 on release from the endoplasmic reticulum (ER) in a sterol-mediated manner. Undergoes sterol-mediated ubiquitination and ER-association degradation (ERAD). Accumulation of sterols in the endoplasmic reticulum (ER) membrane, triggers binding of the reductase to the ER membrane protein INSIG1. This INSIG1 binding leads to the recruitment of the ubiquitin ligase, AMFR/gp78, initiating ubiquitination of the reductase. The ubiquitinated reductase is then extracted from the ER membrane and delivered to cytosolic 26S proteosomes by a mechanism probably mediated by the ATPase Valosin-containing protein VCP/p97. Lys-248 is the main site of ubiquitination. Ubiquitination is enhanced by the presence of a geranylgeranylated protein. [UniProt]
Cellular Localization	Endoplasmic reticulum membrane; Multi-pass membrane protein. [UniProt]

Images



ARG57991 anti-HMGCR antibody WB image

Western blot: Jurkat cell lysate stained with ARG57991 anti-HMGCR antibody.