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MCAT Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17266b

Product Information

Application	WB, E
Primary Accession	Q8IVS2
Other Accession	NP_775738.3, NP_055322.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37271
Calculated MW	42962
Antigen Region	316-344

Additional Information

Gene ID	27349
Other Names	Malonyl-CoA-acyl carrier protein transacylase, mitochondrial, MCT, Mitochondrial malonyl CoA:ACP acyltransferase, Mitochondrial malonyltransferase, [Acyl-carrier-protein] malonyltransferase, MCAT, MT
Target/Specificity	This MCAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 316-344 amino acids from the C-terminal region of human MCAT.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MCAT Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MCAT {ECO:0000303|PubMed:36482135, ECO:0000312|HGNC:HGNC:29622}
Function	Catalyzes the transfer of a malonyl moiety from malonyl-CoA to the free thiol group of the phosphopantetheine arm of the mitochondrial ACP protein

(NDUFAB1) (PubMed:12882974, PubMed:19549604). This suggests the existence of the biosynthesis of fatty acids in mitochondria (PubMed:12882974). Also acts as a mitochondrial small ribosomal subunit (mt-SSU) assembly factor (PubMed:36482135).

Cellular Location Mitochondrion.

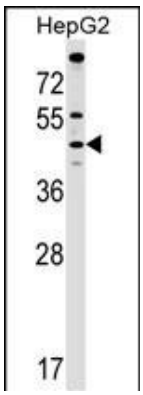
Background

The protein encoded by this gene is found exclusively in the mitochondrion, where it catalyzes the transfer of a malonyl group from malonyl-CoA to the mitochondrial acyl carrier protein. The encoded protein may be part of a fatty acid synthase complex that is more like the type II prokaryotic and plastid complexes rather than the type I human cytosolic complex. Two transcript variants encoding different isoforms have been found for this gene.

References

Kim, S.T., et al. Prostate 70(16):1729-1738(2010)
Eeles, R.A., et al. Nat. Genet. 41(10):1116-1121(2009)
Ma, J., et al. Atherosclerosis 191(1):63-72(2007)
Kuhl, J.E., et al. Am. J. Physiol. Endocrinol. Metab. 290 (6), E1296-E1303 (2006) :
Zhang, L., et al. J. Biol. Chem. 278(41):40067-40074(2003)

Images



MCAT Antibody (C-term) (Cat. #AP17266b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the MCAT antibody detected the MCAT protein (arrow).