

MMADHC Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18061B

Specification

MMADHC Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9H3L0</u> <u>O6AYO6, O99LS1, NP_056517.1</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 32940 226-253

MMADHC Antibody (C-term) - Additional Information

Gene ID 27249

Other Names

Methylmalonic aciduria and homocystinuria type D protein, mitochondrial, MMADHC, C2orf25, CL25022

Target/Specificity

This MMADHC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-253 amino acids from the C-terminal region of human MMADHC.

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

MMADHC Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MMADHC Antibody (C-term) - Protein Information

Name MMADHC (<u>HGNC:25221</u>)



Synonyms C2orf25, CL25022

Function Involved in cobalamin metabolism and trafficking (PubMed:<u>18385497</u>, PubMed:<u>23415655</u>, PubMed:<u>24722857</u>, PubMed:<u>26364851</u>). Plays a role in regulating the biosynthesis and the proportion of two coenzymes, methylcob(III)alamin (MeCbl) and 5'-deoxyadenosylcobalamin (AdoCbl) (PubMed:<u>18385497</u>, PubMed:<u>23415655</u>, PubMed:<u>24722857</u>). Promotes oxidation of cob(II)alamin bound to MMACHC (PubMed:<u>26364851</u>). The processing of cobalamin in the cytosol occurs in a multiprotein complex composed of at least MMACHC, MMADHC, MTRR (methionine synthase reductase) and MTR (methionine synthase) which may contribute to shuttle safely and efficiently cobalamin towards MTR in order to produce methionine (PubMed:<u>27771510</u>).

Cellular Location Cytoplasm. Mitochondrion

Tissue Location Widely expressed at high levels.

MMADHC Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MMADHC Antibody (C-term) - Images



MMADHC Antibody (C-term) (Cat. #AP18061b) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the MMADHC antibody detected the MMADHC protein (arrow).

MMADHC Antibody (C-term) - Background

This gene encodes a mitochondrial protein that is involved in an early step of vitamin B12 metabolism. Vitamin B12 (cobalamin)



is essential for normal development and survival in humans. Mutations in this gene cause methylmalonic aciduria and homocystinuria type cbID (MMADHC), a disorder of cobalamin metabolism that is characterized by decreased levels of the coenzymes adenosylcobalamin and methylcobalamin. Pseudogenes have been identified on chromosomes 11 and X.

MMADHC Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Coelho, D., et al. N. Engl. J. Med. 358(14):1454-1464(2008)