

HADHB Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9859b

Specification

HADHB Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P55084</u>

HADHB Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3032

Other Names

Trifunctional enzyme subunit beta, mitochondrial, TP-beta, 3-ketoacyl-CoA thiolase, Acetyl-CoA acyltransferase, Beta-ketothiolase, HADHB

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HADHB Antibody (C-term) Blocking Peptide - Protein Information

Name HADHB

Function

Mitochondrial trifunctional enzyme catalyzes the last three of the four reactions of the mitochondrial beta-oxidation pathway (PubMed:8135828, PubMed:29915090, PubMed:30850536). The mitochondrial beta-oxidation pathway is the major energy-producing process in tissues and is performed through four consecutive reactions breaking down fatty acids into acetyl-CoA (PubMed:29915090). Among the enzymes involved in this pathway, the trifunctional enzyme exhibits specificity for long- chain fatty acids (PubMed:30850536). Mitochondrial trifunctional enzyme is a heterotetrameric complex composed of two proteins, the trifunctional enzyme subunit alpha/HADHA carries the 2,3-enoyl-CoA hydratase and the 3-hydroxyacyl-CoA dehydrogenase activities, while the trifunctional enzyme subunit beta/HADHB described here bears the 3- ketoacyl-CoA thiolase activity (PubMed:8135828, PubMed:29915090, PubMed:<a href="http://www.uniprot.org/citations/29915090"



target="_blank">30850536).

Cellular Location

Mitochondrion. Mitochondrion inner membrane Mitochondrion outer membrane. Endoplasmic reticulum. Note=Protein stability and association with membranes require HADHA

HADHB Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

HADHB Antibody (C-term) Blocking Peptide - Images

HADHB Antibody (C-term) Blocking Peptide - Background

HADHB encodes the beta subunit of the mitochondrial trifunctional protein, which catalyzes the last three steps of mitochondrial beta-oxidation of long chain fatty acids. The mitochondrial membrane-bound heterocomplex is composed of four alpha and four beta subunits, with the beta subunit catalyzing the 3-ketoacyl-CoA thiolase activity. Mutations in this gene result in trifunctional protein deficiency. The encoded protein can also bind RNA and decreases the stability of some mRNAs. The genes of the alpha and beta subunits of the mitochondrial trifunctional protein are located adjacent to each other in the human genome in a head-to-head orientation.

HADHB Antibody (C-term) Blocking Peptide - References

Purevsuren, J., et al. Mol. Genet. Metab. 98(4):372-377(2009)Bogenhagen, D.F., et al. J. Biol. Chem. 283(6):3665-3675(2008)Wang, R., et al. Zhonghua Fu Chan Ke Za Zhi 41(10):672-675(2006)Hillier, L.W., et al. Nature 434(7034):724-731(2005)