For Research Use Only

## HADHB Monoclonal antibody, PBS Only (Capture)

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**Purification Method:** 

CloneNo.:

1D12F4

Protein A purification

Catalog Number: 67967-1-PBS

**Basic Information** 

Catalog Number: GenBank Accession Number: 67967-1-PBS BC017564

Concentration: GeneID (NCBI): 1mg/ml 3032
Source: UNIPROT ID:

Mouse P55084
Isotype: Full Name:
IgG2b hydroxyacy

Immunogen Catalog Number:

AG30315

hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional

coenzyme A nydratase (trifunctiona protein) heta subunit

protein), beta subunit Calculated MW:

51 kDa Observed MW:

Observed MW 47 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity: human, mouse, rat, pig

## **Background Information**

HADHB, also named as TP- beta, Acetyl-CoA acyltransferase and Beta-ketothiolase, is a mitochondrial trifunctional enzyme subunit beta. Mitochondrial trifunctional enzyme catalyzes the last three of the four reactions of the mitochondrial beta-oxidation pathway. 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. Among the enzymes involved in this pathway, the trifunctional enzyme exhibits specificity for long-chain fatty acids. 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. HADHB has 2 isoforms produced by alternative splicing with the MW of 49 kDa and 51 kDa.

Storage

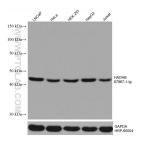
Storage:

Store at -80°C.

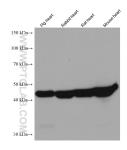
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS only, pH7.3

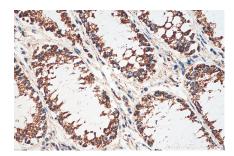
## Selected Validation Data



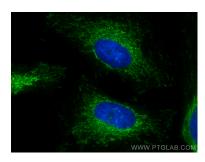
Various lysates were subjected to SDS PAGE followed by western blot with 67967-1-lg (HADHB antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 67967-1-1g (HADHB antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



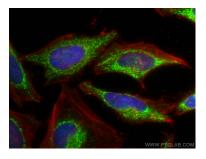
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 67967-1-lg (HADHB antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



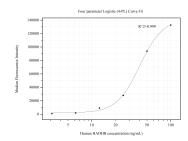
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HADHB antibody (67967-1-1g, Clone: 1D12F4) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 67967-1-lg (HADHB antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HADHB antibody (67967-1-1g, Clone: 1D12F4) at dilution of 1:800 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 67967-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50546-1, HADHB Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 67967-1-PBS. Detection antibody: 67967-2-PBS. Standard:Ag30315. Range: 3.125-100 ng/mL