## For Research Use Only

## HADHB Monoclonal antibody

Catalog Number: 67967-1-Ig



**Basic Information** 

Catalog Number: 67967-1-lg Concentration: 1000 ug/ml

Source: Mouse Isotype: lgG2b

Immunogen Catalog Number:

AG30315

GenBank Accession Number:

BC017564 GeneID (NCBI): 3032 **UNIPROT ID:** 

P55084

Full Name: hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-

Coenzyme A hydratase (trifunctional

protein), beta subunit Calculated MW: 51 kDa

Observed MW: 47 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, ELISA Species Specificity: human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Purification Method:** Protein A purification

CloneNo.: 1D12F4

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:200-1:800

**Positive Controls:** 

WB: LNCaP cells, pig heart tissue, Hela cells, HEK-293 cells, HepG2 cells, Jurkat cells, Rabbit heart tissues, Rat heart tissues, Mouse heart tissues

IHC: human colon cancer tissue.

IF/ICC: HeLa cells,

## **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

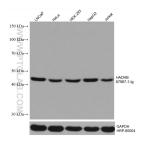
Storage:

Store at -20°C. Stable for one year after shipment.

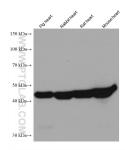
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

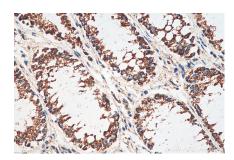
## **Selected Validation Data**



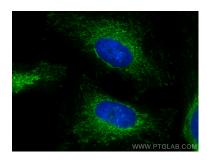
Various lysates were subjected to SDS PAGE followed by western blot with 67967-1-lg (HADHB antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading



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.



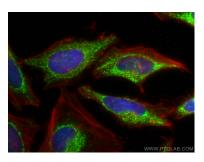
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 67967-1-Ig (HADHB antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 Affini Pure Goat Anti-Mouse IgG(H+L).



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).



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 AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).