

Product Name: KD-Validated HADHA Mouse Monoclonal Antibody**Catalog #: KVA00641**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 83.0kDa

Antigen Information

Gene Name	HADHA
Alternative Names	HADHA; Hydroxyacyl-CoA Dehydrogenase Trifunctional Multienzyme Complex Subunit Alpha; LCHAD; LCEH; MTPA; GBP; Hydroxyacyl-Coenzyme A Dehydrogenase/3-Ketoacyl-Coenzyme A Thiolase/Enoyl-Coenzyme A Hydratase (Trifunctional Protein), Alpha Subunit; Hydroxyacyl-CoA Dehydrogenase/3-Ketoacyl-CoA Thiolase/Enoyl-CoA Hydratase (Trifunctional Protein), Alpha Subunit; Mitochondrial Trifunctional Protein, Alpha Subunit; Trifunctional Enzyme Subunit Alpha, Mitochondrial; Long-Chain-3-Hydroxyacyl-CoA Dehydrogenase; Monolysocardiolipin Acyltransferase; Long-Chain 2-Enoyl-CoA Hydratase; 78 KDa Gastrin-Binding Protein; Gastrin-Binding Protein; HADH; Mitochondrial Long-Chain L-3-Hydroxyacyl-Coenzyme A (CoA) Dehydrogenase, Alpha Subunit; Mitochondrial Long-Chain 2-Enoyl-Coenzyme A (CoA) Hydratase, Alpha Subunit; 3-Ketoacyl-Coenzyme A (CoA)

Thiolase, Alpha Subunit; Mitochondrial Trifunctional Enzyme, Alpha Subunit; 3-Oxoacyl-CoA Thiolase; EC 2.3.1.- ; TP-ALPHA; TP-Alpha; ECHA

Gene ID	3030.0
SwissProt ID	P40939
Immunogen	Recombinant protein of human HADHA

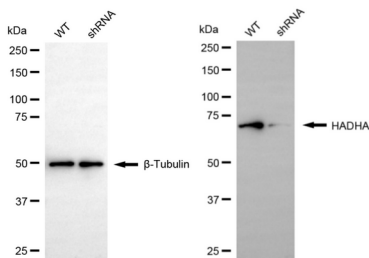
Background

This gene encodes the alpha 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 alpha subunit catalyzing the 3-hydroxyacyl-CoA dehydrogenase and enoyl-CoA hydratase activities. Mutations in this gene result in trifunctional protein deficiency or LCHAD deficiency. 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. [provided by RefSeq, Jul 2008]

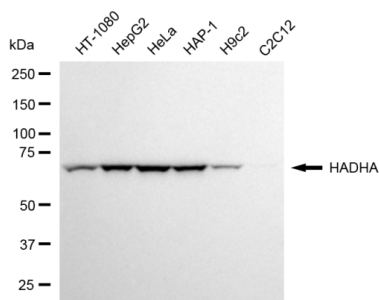
Research Area

Tags & Cell Markers, Signal Transduction, Cardiovascular, Cancer, Metabolism

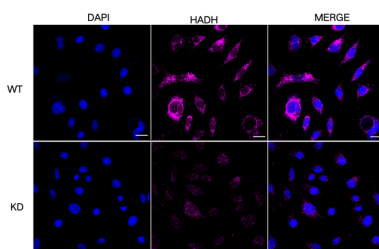
Image Data



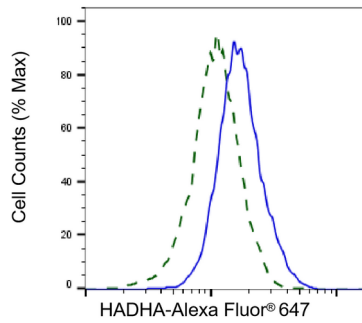
Western blotting analysis using HADHA antibody (KVA00641). HADHA expression in wild type (WT) and HADHA shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with HADHA antibody (KVA00641, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



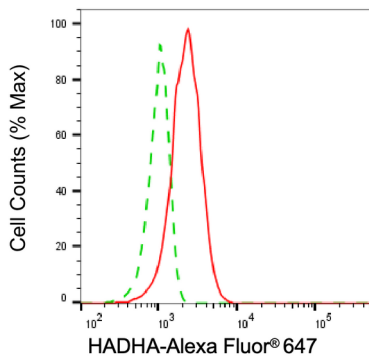
Western blotting analysis using HADHA antibody (KVA00641). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with HADHA antibody (KVA00641, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using HADHA antibody (KVA00641, 1:1,000). Top panel: wild-type (WT); Bottom panel: HADHA shRNA knockdown (KD). Nuclei were stained blue with DAPI; HADHA was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of HADHA knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with HADHA antibody (KVA00641, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of HADHA expression in HepG2 cells using HADHA antibody (KVA00641, 1:2,000). Green, isotype control; red, HADHA.