

# HADHA Rabbit mAb

Catalog # AP75524

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IP, ICC

P40939 **Primary Accession** 

Human, Mouse, Rat Reactivity

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 83000

### **Additional Information**

Gene ID 3030

**Other Names HADHA** 

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IP~~N/A ICC~~N/A

**Format** 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

### **Protein Information**

**HADHA** Name

**Synonyms HADH** 

**Function** Mitochondrial trifunctional enzyme catalyzes the last three of the four

reactions of the mitochondrial beta-oxidation pathway (PubMed: 1550553,

PubMed: 29915090, PubMed: 30850536, PubMed: 8135828,

PubMed: 31604922). 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: <u>29915090</u>). Among the enzymes involved in this pathway, the trifunctional enzyme exhibits specificity for long-chain fatty acids

(PubMed:30850536, PubMed:31604922). Mitochondrial trifunctional enzyme is a heterotetrameric complex composed of two proteins, the trifunctional enzyme subunit alpha/HADHA described here carries the 2,3-enoyl-CoA hydratase and the 3-hydroxyacyl-CoA dehydrogenase activities while the trifunctional enzyme subunit beta/HADHB bears the 3-ketoacyl-CoA thiolase

activity (PubMed:29915090, PubMed:30850536, PubMed:8135828). Independently of subunit beta, HADHA also exhibits a cardiolipin

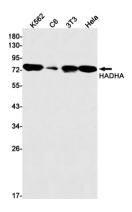
acyltransferase activity that participates in cardiolipin remodeling; cardiolipin

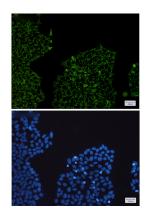
is a major mitochondrial membrane phospholipid (PubMed: 23152787, PubMed: 31604922). HADHA may act downstream of Tafazzin/TAZ, that remodels monolysocardiolipin (MLCL) to a cardiolipin intermediate, and then HADHA may continue to remodel this species into mature tetralinoleoyl-cardiolipin (PubMed: 31604922). Has also been proposed to act directly on MLCL; capable of acylating MLCL using different acyl-CoA substrates, with highest activity for oleoyl-CoA (PubMed: 23152787).

#### **Cellular Location**

Mitochondrion. Mitochondrion inner membrane Note=Protein stability and association with mitochondrion inner membrane do not require HADHB.

## **Images**







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