**BACKGROUND**

HADHA (trifunctional enzyme subunit α, mitochondrial), also known as TP-α, is the 763 amino acid α subunit of the mitochondrial trifunctional protein, which catalyzes the last three steps of mitochondrial β-oxidation of long chain fatty acids. This mitochondrial complex is composed of four α (HADHA) and four β (HADHB) subunits, and the α subunit (HADHA) is responsible for catalyzing the 3-hydroxyacyl-CoA dehydrogenase and enoyl-CoA hydratase activities. Mutations in the HADHA gene can lead to long-chain 3-hydroxyacyl-coenzyme A dehydrogenase (LCHAD) deficiency or mitochondrial trifunctional protein deficiency. LCHAD deficiency is characterized by a deficiency of the dehydrogenase activity with normal hydratase activity and moderately decreased thiolase activity. In mitochondrial trifunctional protein deficiency, all three activities of the protein, dehydrogenase, hydratase, and thiolase, are deficient.

**CHROMOSOMAL LOCATION**

Genetic locus: HADHA (human) mapping to 2p23.3; Hadha (mouse) mapping to 5 B1.

**SOURCE**

HADHA (E-8) is a mouse monoclonal antibody raised against amino acids 481-763 mapping at the C-terminus of HADHA of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HADHA (E-8) is available conjugated to agarose (sc-374497 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374497 HRP), 200 µg/ml; for WB, (HCIP) and ELISA; to either phycocerythin (sc-374497 PE), fluorescein (sc-374497 FITC), Alexa Fluor® 488 (sc-374497 AF488), Alexa Fluor® 546 (sc-374497 AF546), Alexa Fluor® 594 (sc-374497 AF594) or Alexa Fluor® 647 (sc-374497 AF647), 200 µg/ml; for WB (RGB), IF, HCIP and FCM; and to either Alexa Fluor® 680 (sc-374497 AF680) or Alexa Fluor® 790 (sc-374497 AF790), 100 µg/ml, for Near-Infrared (NiR) WB, IF and FCM.

**APPLICATIONS**

HADHA (E-8) is recommended for detection of HADHA of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:5000), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HADHA siRNA (h): sc-75220, HADHA siRNA (m): sc-75221, HADHA shRNA Plasmid (h): sc-75220-SH, HADHA shRNA Plasmid (m): sc-75221-SH, HADHA shRNA (h) Lentiviral Particles: sc-75220-V and HADHA shRNA (m) Lentiviral Particles: sc-75221-V.

Molecular Weight of HADHA: 83 kDa.

Positive Controls: Ramos cell lysate: sc-2216, Jurkat whole cell lysate: sc-2204 or MOLT-4 cell lysate: sc-2233.

**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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