

HADHA (E-20): sc-82185

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 3 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-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HADHA of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82185 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HADHA (E-20) is recommended for detection of HADHA of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HADHA (E-20) is also recommended for detection of HADHA in additional species, including equine, canine and porcine.

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.

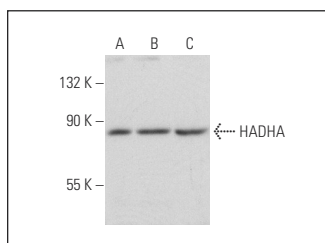
Molecular Weight of HADHA: 83 kDa.

Positive Controls: HADHA (h2): 293T Lysate: sc-170689, HeLa whole cell lysate: sc-2200 or Ramos cell lysate: sc-2216.

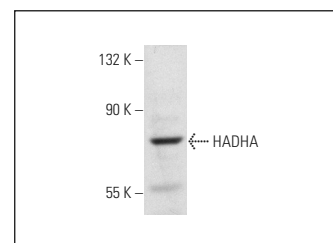
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HADHA (E-20): sc-82185. Western blot analysis of HADHA expression in non-transfected 293T: sc-117752 (A), human HADHA transfected 293T: sc-170689 (B) and HeLa (C) whole cell lysates.



HADHA (E-20): sc-82185. Western blot analysis of HADHA expression in Ramos whole cell lysate.

SELECT PRODUCT CITATIONS

- Goichon, A., et al. 2013. An enteral leucine supply modulates human duodenal mucosal proteome and decreases the expression of enzymes involved in fatty acid β -oxidation. *J. Proteomics* 78: 535-544.
- Kao, Y.T., et al. 2015. Japanese encephalitis virus nonstructural protein NS5 interacts with mitochondrial trifunctional protein and impairs fatty acid β -oxidation. *PLoS Pathog.* 11: e1004750.

RESEARCH USE

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

PROTOCOLS

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



Try **HADHA (E-8): sc-374497** or **HADHA (G-9): sc-515278**, our highly recommended monoclonal alternatives to HADHA (E-20).