

Goat Anti-HADH / HADHSC Antibody
Peptide-affinity purified goat antibody
Catalog # AF1518a

Specification

Goat Anti-HADH / HADHSC Antibody - Product Information

Application	WB, E
Primary Accession	Q16836
Other Accession	NP_005318 , 3033 , 15107 (mouse)
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	34294

Goat Anti-HADH / HADHSC Antibody - Additional Information

Gene ID 3033

Other Names

Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial, HCDH, 1.1.1.35, Medium and short-chain L-3-hydroxyacyl-coenzyme A dehydrogenase, Short-chain 3-hydroxyacyl-CoA dehydrogenase, HADH, HAD, HADHSC, SCHAD

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-HADH / HADHSC Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-HADH / HADHSC Antibody - Protein Information

Name HADH

Function

Mitochondrial fatty acid beta-oxidation enzyme that catalyzes the third step of the beta-oxidation cycle for medium and short-chain 3-hydroxy acyl-CoAs (C4 to C10) (PubMed:10231530, PubMed:11489939, PubMed:16725361). Plays a role in the control of insulin secretion by inhibiting the activation of glutamate dehydrogenase 1 (GLUD1), an enzyme that has an important role in regulating amino acid-induced insulin secretion (By similarity). Plays a role in the maintenance of normal spermatogenesis through the reduction of fatty acid accumulation in the testes (By similarity).

Cellular Location

Mitochondrion matrix

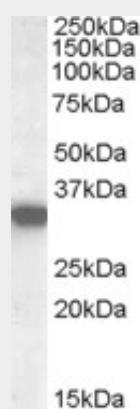
Tissue Location

Expressed in liver, kidney, pancreas, heart and skeletal muscle.

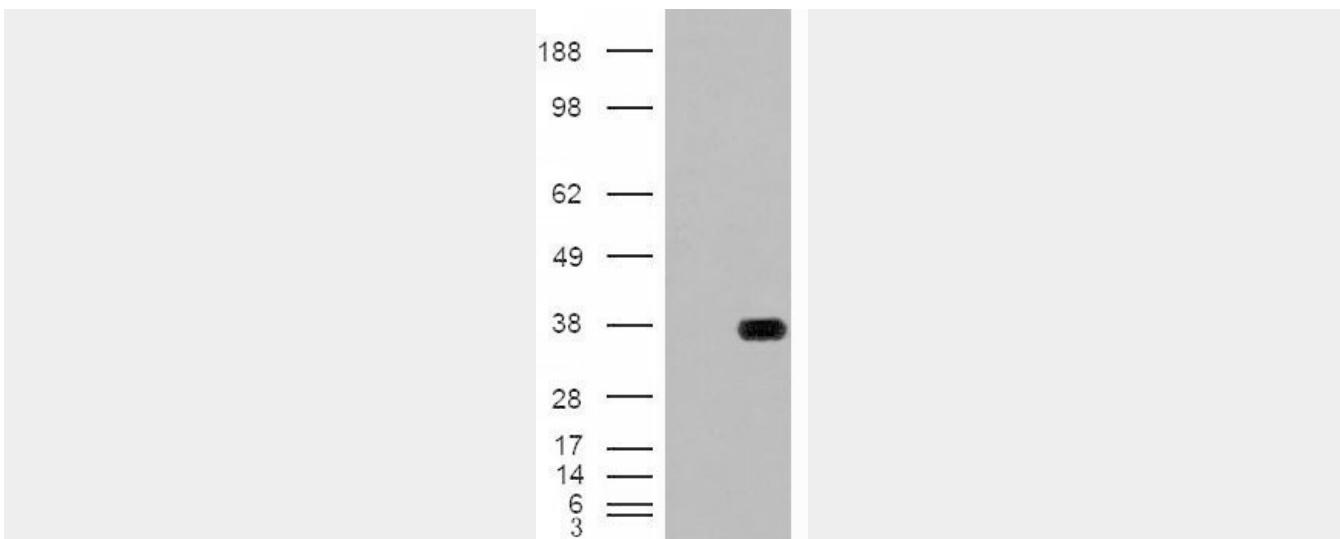
Goat Anti-HADH / HADHSC Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-HADH / HADHSC Antibody - Images

AF1518a (0.02 µg/ml) staining of Human Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing HADH (RC201752) with C-terminal tag (DYKDDDDK) and probed with anti-DYKDDDDK in the left panel and with AF1518a in the right panel (mock transfection in first and last lanes), tested by Origene.

Goat Anti-HADH / HADHSC Antibody - Background

This gene is a member of the 3-hydroxyacyl-CoA dehydrogenase gene family. The encoded protein functions in the mitochondrial matrix to catalyze the oxidation of straight-chain 3-hydroxyacyl-CoAs as part of the beta-oxidation pathway. Its enzymatic activity is highest with medium-chain-length fatty acids. Mutations in this gene cause one form of familial hyperinsulinemic hypoglycemia. The human genome contains a related pseudogene of this gene on chromosome 15.

Goat Anti-HADH / HADHSC Antibody - References

A systematic gene-based screen of chr4q22-q32 identifies association of a novel susceptibility gene, DKK2, with the quantitative trait of alcohol dependence symptom counts. Kalsi G, et al. *Hum Mol Genet*, 2010 Jun 15. PMID 20332099.

Identification of a diffuse form of hyperinsulinemic hypoglycemia by 18-fluoro-L-3,4 dihydroxyphenylalanine positron emission tomography/CT in a patient carrying a novel mutation of the HADH gene. Di Candia S, et al. *Eur J Endocrinol*, 2009 Jun. PMID 19318379.

The HADHSC gene encoding short-chain L-3-hydroxyacyl-CoA dehydrogenase (SCHAD) and type 2 diabetes susceptibility: the DAMAGE study. van Hove EC, et al. *Diabetes*, 2006 Nov. PMID 17065362.

Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. *Genome Res*, 2006 Jan. PMID 16344560.

3-Hydroxyacyl-CoA dehydrogenase and short chain 3-hydroxyacyl-CoA dehydrogenase in human health and disease. Yang SY, et al. *FEBS J*, 2005 Oct. PMID 16176262.