10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

Goat Anti-HADH / HADHSC Antibody - Product Information

Application	**WB**
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

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 fatty acyl-CoAs (C4 to C10) (PubMed:10231530, PubMed:11489939, PubMed:<a

href="http://www.uniprot.org/citations/16725361" target="_blank">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).

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.

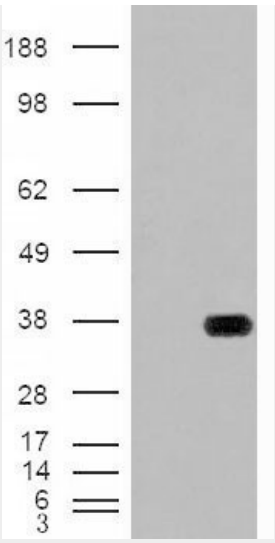
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.

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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.