

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

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**Goat Anti-HADH / HADHSC Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q16836</a>
Other Accession	<a href="#">NP_005318</a> , <a href="#">3033</a> , <a href="#">15107 (mouse)</a>
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 fatty acyl-CoAs (C4 to C10) (PubMed:<a href="http://www.uniprot.org/citations/10231530" target="\_blank">10231530</a>, PubMed:<a href="http://www.uniprot.org/citations/11489939" target="\_blank">11489939</a>, PubMed:<a href="http://www.uniprot.org/citations/16725361" target="\_blank">16725361</a>). 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.

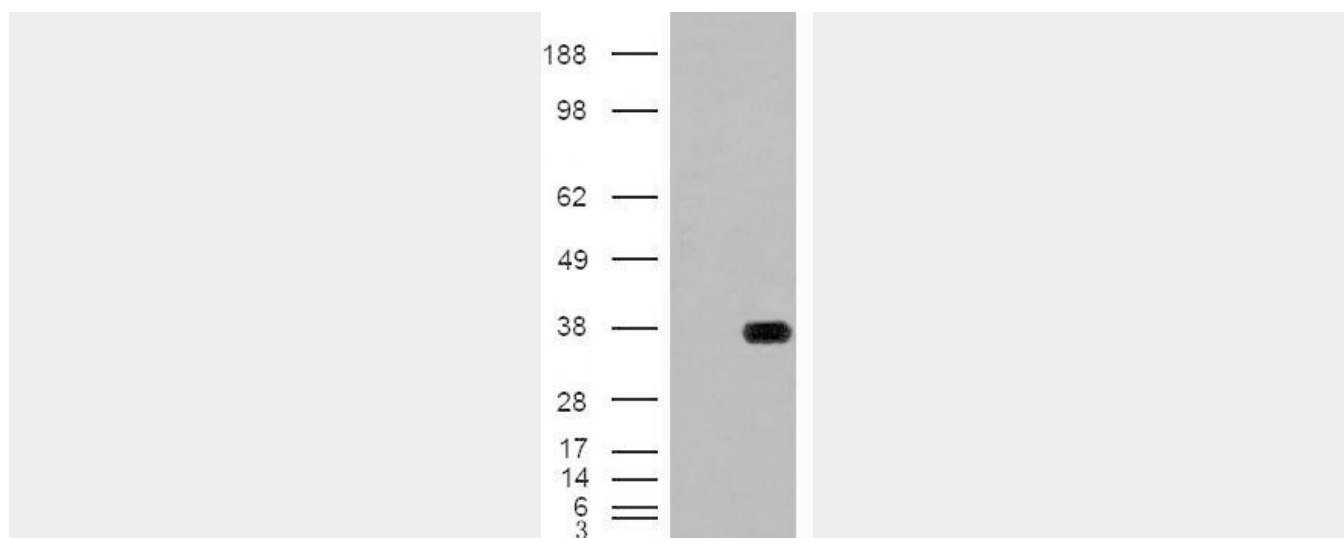
**Goat Anti-HADH / HADHSC Antibody - Protocols**

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.