

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody

Peptide-affinity purified goat antibody Catalog # AF1148a

Specification

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody - Product Information

Application WB, E
Primary Accession O9BUT1

Other Accession <u>NP_064524</u>, <u>56898</u>

Reactivity
Predicted
Host
Clonality
Concentration

Reactivity
Human
Mouse, Rat
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 26724

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody - Additional Information

Gene ID 56898

Other Names

3-hydroxybutyrate dehydrogenase type 2, 1.1.1.-, 1.1.1.30, Dehydrogenase/reductase SDR family member 6, Oxidoreductase UCPA, R-beta-hydroxybutyrate dehydrogenase, Short chain dehydrogenase/reductase family 15C member 1, BDH2, DHRS6, SDR15C1

Dilution

WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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-BDH2 / DHRS6 (aa 60 to 71) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody - Protein Information

Name BDH2 {ECO:0000303|PubMed:35150746, ECO:0000312|HGNC:HGNC:32389}

Function



NAD(H)-dependent dehydrogenase/reductase with a preference for cyclic substrates (By similarity) (PubMed:35150746). Catalyzes stereoselective conversion of 4-oxo-L-proline to cis-4-hydroxy-L- proline, likely a detoxification mechanism for ketoprolines (PubMed:35150746). Mediates the formation of 2,5-dihydroxybenzoate (2,5-DHBA), a siderophore that chelates free cytoplasmic iron and associates with LCN2, thereby regulating iron transport and homeostasis while protecting cells against free radical-induced oxidative stress. The iron-siderophore complex is imported into mitochondria, providing an iron source for mitochondrial metabolic processes in particular heme synthesis (By similarity). May act as a 3-hydroxybutyrate dehydrogenase (PubMed:16380372).

Cellular Location Cytoplasm.

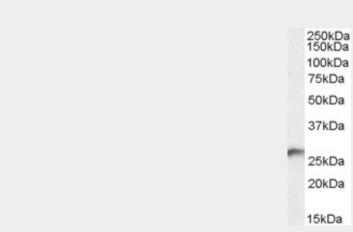
Tissue LocationDetected in liver (at protein level).

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody - Protocols

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

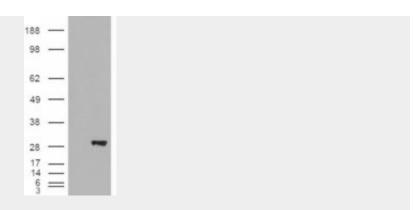
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) Antibody - Images



AF1148a (0.3 μ g/ml) staining of Human Kidney lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





HEK293 overexpressing BDH2 (RC210586) and probed with AF1148a (mock transfection in first lane), tested by Origene.

Goat Anti-BDH2 / DHRS6 (aa 60 to 71) 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.

The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. Persson B, et al. Chem Biol Interact, 2009 Mar 16. PMID 19027726.

Characterization of human DHRS6, an orphan short chain dehydrogenase/reductase enzyme: a novel, cytosolic type 2 R-beta-hydroxybutyrate dehydrogenase. Guo K, et al. J Biol Chem, 2006 Apr 14. PMID 16380372.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.

Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039.