

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 Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>O9BUT1</u> <u>NP\_064524</u>, <u>56898</u> Human Mouse, Rat Goat Polyclonal 100ug/200ul IgG 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

#### 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:<a href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). (PubMed:<a href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). (Catalyzes stereoselective conversion of 4-oxo-L-proline to cis-4-hydroxy-L- proline, likely a detoxification mechanism for ketoprolines (PubMed:<a



href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>). 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:<a href="http://www.uniprot.org/citations/16380372" target=" blank">16380372</a>).

Cellular Location Cytoplasm.

**Tissue Location** Detected 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.

## <u>Western Blot</u>

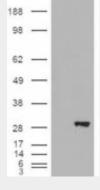
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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



AF1148a (0.3  $\mu$ g/ml) staining of Human Kidney lysate (35  $\mu$ 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.