

#### BDH2 Antibody (aa60-71)

Goat Polyclonal Antibody Catalog # ALS16079

#### **Specification**

#### BDH2 Antibody (aa60-71) - Product Information

Application WB
Primary Accession Q9BUT1

Reactivity Human, Monkey

Host Goat
Clonality Polyclonal
Calculated MW 27kDa KDa

#### BDH2 Antibody (aa60-71) - 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

# **Target/Specificity**

Human BDH2.

### **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

#### **Precautions**

BDH2 Antibody (aa60-71) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **BDH2 Antibody (aa60-71) - 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 (PubMed:<a href="http://www.uniprot.org/citations/35150746" target="\_blank">35150746</a>) (By similarity). 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.

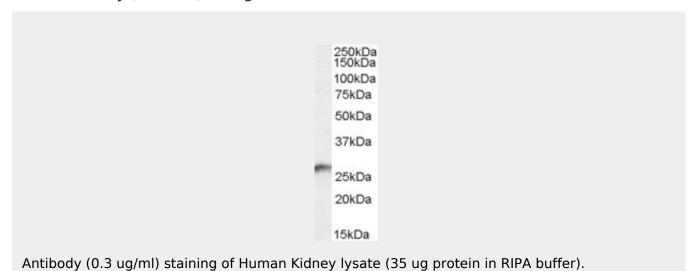
**Tissue Location**Detected in liver (at protein level).

### BDH2 Antibody (aa60-71) - Protocols

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

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

### BDH2 Antibody (aa60-71) - Images



### BDH2 Antibody (aa60-71) - Background

Dehydrogenase that mediates the formation of 2,5- dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin and associates with LCN2, thereby playing a key role in iron homeostasis and transport. Also acts as a 3-hydroxybutyrate dehydrogenase (By similarity).

## BDH2 Antibody (aa60-71) - References

Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000). Clark H.F.,et al.Genome Res. 13:2265-2270(2003). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Hillier L.W.,et al.Nature 434:724-731(2005).