

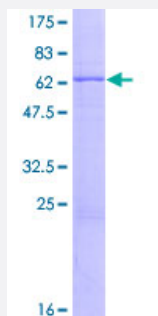
Full-Length

# BDH1 (Human) Recombinant Protein (P02)

Catalog # H00000622-P02

Size 25 ug, 10 ug

## Applications



## Specification

### Product Description

Human BDH1 full-length ORF ( NP\_004042.1, 1 a.a. - 343 a.a.) recombinant protein with GST-tag at N-terminal.

### Sequence

MLATRLSRPLSRPLPGKTLSDRENGARRPLLLGSTSFPIGRRTYASAAEPVGSKAVLVTGCDSG  
FGFSLAKHLHSGFLVFAGCLMKDKGHDGVKELDSLNSDRLRTVQLNVCSSSEEKVVEMRSS  
LKDPEKGMWGLVNNAGISTFGEVEFTSLETYKQVAEVNLWGTVRMTKSFLPLIRRAKGRVVNISS  
MLGRMANPARSPYCITKFGVEAFSDCLRYEMYPLGVKVSVEPGNFIAATSLYSPESIQAIKKMW  
EELPEVVRKDYGKKYFDEKIAKMETCYSSGSTDTSPVIDAVTHALTATTPYTRYHPMDYYWWLRM  
QIMTHLPGAISDMIYR

### Host

Wheat Germ (in vitro)

### Theoretical MW (kDa)

64.6

### Interspecies Antigen Sequence

Mouse (86); Rat (87)

### Preparation Method

[in vitro wheat germ expression system](#)

### Purification

Glutathione Sepharose 4 Fast Flow

### Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

### Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

**Storage Instruction**

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

**Note**

Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — BDH1

**Entrez GeneID**[622](#)**GeneBank Accession#**[NM\\_004051.4](#)**Protein Accession#**[NP\\_004042.1](#)**Gene Name**

BDH1

**Gene Alias**

BDH, MGC2723, MGC4347, MGC9788, SDR9C1

**Gene Description**

3-hydroxybutyrate dehydrogenase, type 1

**Omim ID**[603063](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene encodes a member of the short-chain dehydrogenase/reductase gene family. The encoded protein forms a homotetrameric lipid-requiring enzyme of the mitochondrial membrane and has a specific requirement for phosphatidylcholine for optimal enzymatic activity. The encoded protein catalyzes the interconversion of acetoacetate and (R)-3-hydroxybutyrate, the two major ketone bodies produced during fatty acid catabolism. Alternatively spliced transcript variants encoding the same protein have been described. [provided by RefSeq]

**Other Designations**

(R)-3-hydroxybutyrate dehydrogenase|3-hydroxybutyrate dehydrogenase|3-hydroxybutyrate dehydrogenase (heart, mitochondrial)|D-beta-hydroxybutyrate dehydrogenase, mitochondrial|short chain dehydrogenase/reductase family 9C, member 1

## Pathway

- [Butanoate metabolism](#)
- [Metabolic pathways](#)
- [Synthesis and degradation of ketone bodies](#)