

Anti-BDH1 Antibody [C3-A5]

EM1709-15



Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IHC-P
Molecular Wt:	45 kDa
Clone number:	C3-A5

Description: BDH1 (3-hydroxybutyrate dehydrogenase, type 1), also known as BDH or SDR9C1, is a 343 amino acid protein that localizes to the mitochondrial matrix and belongs to the short-chain dehydrogenases/reductases (SDR) family. Existing as a homotetramer, BDH1 functions to catalyze the NAD⁺-dependent interconversion of (R)-3-hydroxybutanoate and acetoacetate, a reaction that is allosterically activated by phosphatidylcholine. As both (R)-3-hydroxybutanoate and acetoacetate are two major ketone bodies produced during fatty acid catabolism, BDH1 plays an important role in the metabolic degradation of fatty acids. The gene encoding BDH1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

Immunogen: Recombinant protein

Positive control: HepG2, NIH/3T3 cell lysate, human prostate tissue, human colorectal cancer tissue, human liver cancer tissue.

Subcellular location: Mitochondrion matrix.

Database links: SwissProt: Q02338 Human | Q80XN0 Mouse

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:50-1:200

Storage Buffer: Purified antibody in PBS with 0.05% sodium azide.

Storage Instruction: 4°C; -20°C for long term storage.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

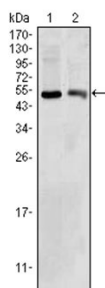


Fig1: Western blot analysis of BDH1 on HepG2 and NIH/3T3 cell lysate using anti-BDH1 antibody at 1/1,000 dilution.

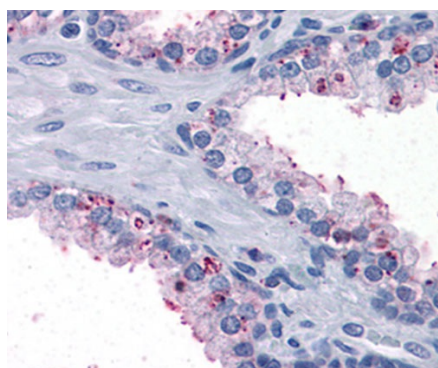


Fig2: Immunohistochemical analysis of paraffin-embedded human prostate tissue using anti-BDH1 antibody. Counter stained with hematoxylin.

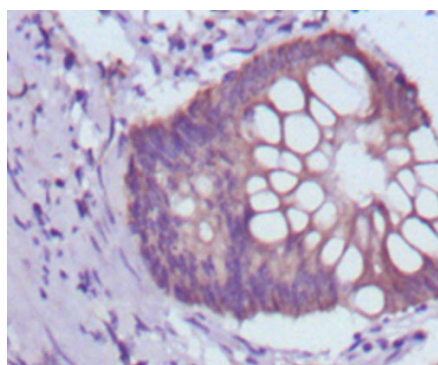


Fig3: Immunohistochemical analysis of paraffin-embedded human colorectal cancer tissue using anti-BDH1 antibody. Counter stained with hematoxylin.

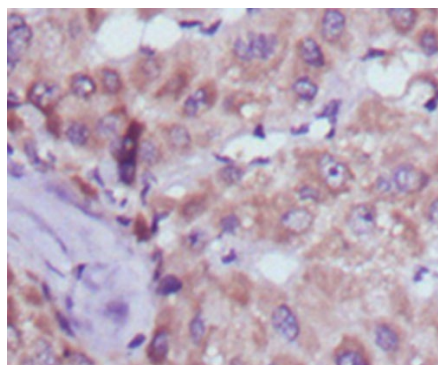


Fig4: Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-BDH1 antibody. Counter stained with hematoxylin.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Loeb-Hennard C et al. (R)-3-hydroxybutyrate dehydrogenase: selective phosphatidylcholine binding by the C-terminal domain. *Biochemistry*. 2000 Oct 3;39(39):11928-38.
2. Xu XR et al. Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver. *Proc Natl Acad Sci U S A*. 2001 Dec 18;98(26):15089-94.

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