

BHMT Monoclonal Antibody

Catalog No: YM0061

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: BHMT

Fields: >>Glycine, serine and threonine metabolism;>>Cysteine and methionine

metabolism;>>Metabolic pathways

Gene Name: BHMT

Protein Name: Betaine--homocysteine S-methyltransferase 1

Human Gene Id: 635

Human Swiss Prot Q93088

No:

Mouse Swiss Prot 035490

No:

Immunogen: Purified recombinant fragment of BHMT expressed in E. Coli.

Specificity: BHMT Monoclonal Antibody detects endogenous levels of BHMT protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution : WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

Purification: Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 45kD

Cell Pathway: Glycine; serine and threonine metabolism; Cysteine and methionine metabolism;

P References : 1. Genome Res. 2004 Oct;14(10B):2121-7.

2. Biochem J. 2007 Jan 1;401(1):87-96.

Background: betaine--homocysteine S-methyltransferase(BHMT) Homo sapiens This gene

encodes a cytosolic enzyme that catalyzes the conversion of betaine and homocysteine to dimethylglycine and methionine, respectively. Defects in this gene could lead to hyperhomocyst(e)inemia, but such a defect has not yet been

observed. [provided by RefSeq, Jul 2008],

Function: catalytic activity:Trimethylammonioacetate + L-homocysteine = dimethylglycine

+ L-methionine.,cofactor:Binds 1 zinc ion per subunit.,function:Involved in the regulation of homocysteine metabolism. Converts betaine and homocysteine to dimethylglycine and methionine, respectively. This reaction is also required for the irreversible oxidation of choline.,pathway:Amine and polyamine degradation; betaine degradation; sarcosine from betaine: step 1/2.,pathway:Amino-acid biosynthesis; L-methionine biosynthesis via de novo pathway; L-methionine from L-homocysteine (BhmT route): step 1/1.,similarity:Contains 1 Hcy-binding domain.,subunit:Homotetramer.,tissue specificity:Found exclusively in liver and

kidney.,

Subcellular Location:

Cytoplasm, cytosol . Nucleus . Predominantly localized in the cytoplasm with a small fraction detected in the nucleus. Translocates into the nucleus upon

oxidative stress...

Expression : Found exclusively in liver and kidney.

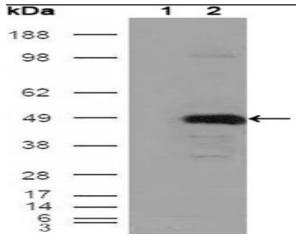
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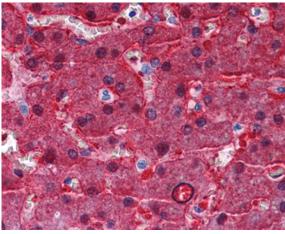
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Products Images

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Western Blot analysis using BHMT Monoclonal Antibody against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY BHMT cDNA (2).



Immunohistochemistry analysis of paraffin-embedded human Liver tissues with AEC staining using BHMT Monoclonal Antibody.