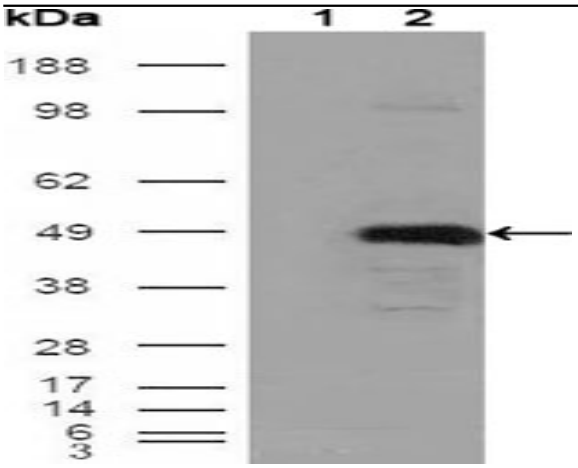
Best Tools for immunology Research

BHMT Monoclonal Antibody

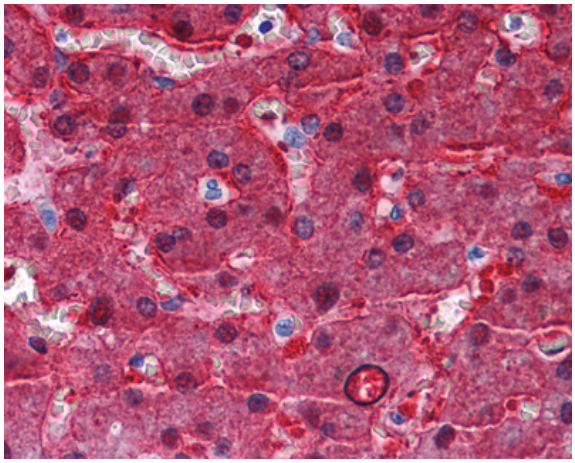
Catalog No :	YM0061
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	BHMT
Fields :	>>Glycine, serine and threonine metabolism;>>Cysteine and methionine metabolism;>>Metabolic pathways
Gene Name :	BHMT
Protein Name :	Betaine--homocysteine S-methyltransferase 1
Human Gene Id :	635
Human Swiss Prot No :	Q93088
Mouse Swiss Prot No :	O35490
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.
Tag :	hot
Sort :	2685
No4 :	1
Host :	Mouse
Modifications :	Unmodified

Products Images



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.