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CBS Rabbit pAb

Catalog # AP99118

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P35520
Other Accession	P35520
Reactivity	Mouse
Predicted	Rat, Human, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60587
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human HIP4
Epitope Specificity	177-280/400
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene acts as a homotetramer to catalyze the conversion of homocysteine to cystathionine, the first step in the transsulfuration pathway. The encoded protein is allosterically activated by adenosyl-methionine and uses pyridoxal phosphate as a cofactor. Defects in this gene can cause cystathionine beta-synthase deficiency (CBSD), which can lead to homocystinuria. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, May 2010].

Additional Information

Gene ID	875
Other Names	CBSL; HIP4; CBS_HUMAN; CBS; Beta-thionase; Serine sulfhydrase; 4.2.1.22; CBS_MOUSE; CBS_RAT; Hemoprotein H-450; cystathionine beta-synthase; cystathionine-beta-synthase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CBS

Function	Hydro-lyase catalyzing the first step of the transsulfuration pathway, where the hydroxyl group of L-serine is displaced by L- homocysteine in a beta-replacement reaction to form L-cystathionine, the precursor of L-cysteine. This catabolic route allows the elimination of L-methionine and the toxic metabolite L-homocysteine (PubMed:20506325, PubMed:23974653, PubMed:23981774). Also involved in the production of hydrogen sulfide, a gasotransmitter with signaling and cytoprotective effects on neurons (By similarity).
Cellular Location	Cytoplasm. Nucleus
Tissue Location	In the adult strongly expressed in liver and pancreas, some expression in heart and brain, weak expression in lung and kidney. In the fetus, expressed in brain, liver and kidney

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.