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GNMT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18057c

Product Information

Application	WB, E
Primary Accession	Q14749
Other Accession	Q29513, Q29555, NP_061833.1
Reactivity	Human
Predicted	Pig, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36190
Calculated MW	32742
Antigen Region	78-106

Additional Information

Gene ID	27232
Other Names	Glycine N-methyltransferase, GNMT
Target/Specificity	This GNMT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 78-106 amino acids from the Central region of human GNMT.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GNMT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GNMT (HGNC:4415)
Function	Catalyzes the methylation of glycine by using S- adenosylmethionine (AdoMet) to form N-methylglycine (sarcosine) with the concomitant production of S-adenosylhomocysteine (AdoHcy), a reaction regulated by the

binding of 5-methyltetrahydrofolate. Plays an important role in the regulation of methyl group metabolism by regulating the ratio between S-adenosyl-L-methionine and S-adenosyl-L- homocysteine.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P13255}.

Tissue Location Expressed only in liver, pancreas, and prostate.

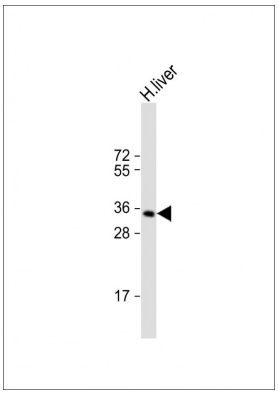
Background

The protein encoded by this gene is an enzyme that catalyzes the conversion of S-adenosyl-L-methionine (along with glycine) to S-adenosyl-L-homocysteine and sarcosine. The encoded protein is found in the cytoplasm and acts as a homotetramer. Defects in this gene are a cause of GNMT deficiency (hypermethioninemia).

References

Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Lee, C.M., et al. Gene 443 (1-2), 151-157 (2009) :
Boyles, A.L., et al. Genet. Epidemiol. 33(3):247-255(2009)
Yen, C.H., et al. Toxicol. Appl. Pharmacol. 235(3):296-304(2009)
Franke, B., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 85(3):216-226(2009)

Images



Anti-GNMT Antibody (Center) at 1:1000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.