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GNMT Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1076b

Product Information

Application	WB, E
Primary Accession	Q14749
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5760
Calculated MW	32742
Antigen Region	218-248

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 218-248 amino acids from the C-terminal 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (C-term) 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.

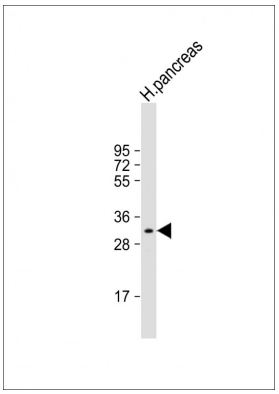
Background

Glycine N-methyltransferase catalyzes the synthesis of N-methylglycine (sarcosine) from glycine using S-adenosylmethionine (AdoMet) as the methyl donor. GNMT acts as an enzyme to regulate the ratio of S-adenosylmethionine to S-adenosylhomocysteine (AdoHcy) and participates in the detoxification pathway in liver cells.

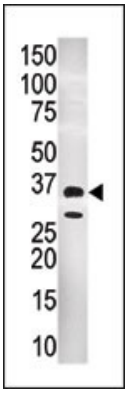
References

Augoustides-Savvopoulou, P., et al., J. Inherit. Metab. Dis. 26(8):745-759 (2003). Tseng, T.L., et al., Cancer Res. 63(3):647-654 (2003). Luka, Z., et al., Hum. Genet. 110(1):68-74 (2002). Strausberg RL, et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Mudd, S.H., et al., J. Inherit. Metab. Dis. 24(4):448-464 (2001).

Images



Anti-GNMT Antibody (C-term) at 1:1000 dilution + human pancreas 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.



Western blot analysis of anti-GNMT Pab (Cat. #AP1076b) in CEM cell line tissue lysate (35ug/lane).GNMT(arrow) was detected using the purified Pab.

Citations

- LRH-1 is a critical determinant of methyl-pool metabolism.
- The nutrigenetics of hyperhomocysteinemia: quantitative proteomics reveals differences in the methionine cycle enzymes of gene-induced versus diet-induced hyperhomocysteinemia.