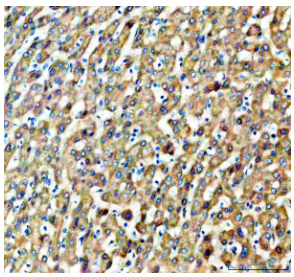
GNMT Antibody / Glycine N-Methyltransferase Antibody (FY13487)

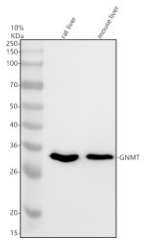
Catalog No.	Formulation	Size
FY13487	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

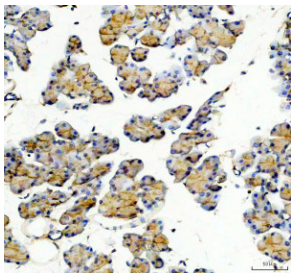
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q14749
Applications	Western Blot : 0.5-1ug/ml ELISA : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This GNMT Antibody / Glycine N-Methyltransferase Antibody is available for research use only.



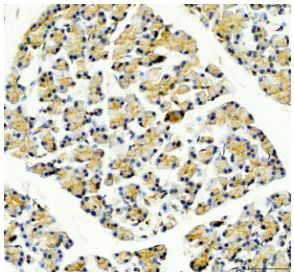
GNMT Antibody Human Liver IHC. Immunohistochemical staining of FFPE human liver tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated GNMT expression using an HRP-conjugated detection system with DAB chromogen. Hepatocytes exhibit diffuse moderate to strong cytoplasmic staining, consistent with the high physiological expression of glycine N-methyltransferase in normal liver. The staining pattern supports the use of GNMT Antibody, a Glycine N-Methyltransferase Antibody, for immunohistochemical detection of GNMT expression in human liver tissue.



GNMT Antibody Mouse and Rat Liver WB. Western blot analysis detected GNMT in rat liver (lane 1) and mouse liver (lane 2) tissue lysates. A single prominent immunoreactive band is observed at approximately 33 kDa, matching the predicted molecular weight of GNMT. The strong liver-specific signal is consistent with the abundant physiological expression of glycine N-methyltransferase in hepatic tissue. GNMT Antibody, a Glycine N-Methyltransferase Antibody, demonstrates specific detection of GNMT in rodent liver lysates, supporting its use for Western blot analysis of this key enzyme involved in one-carbon metabolism and methylation homeostasis.



GNMT Antibody Mouse Pancreas IHC. Immunohistochemical staining of FFPE mouse pancreas tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated GNMT expression using an HRP-conjugated detection system with DAB chromogen. Pancreatic acinar cells exhibit moderate predominantly cytoplasmic staining, while surrounding stromal tissue shows minimal background reactivity. The staining pattern supports the use of GNMT Antibody, a Glycine N-Methyltransferase Antibody, for immunohistochemical detection of GNMT expression in mouse pancreas tissue.



GNMT Antibody Rat Pancreas IHC. Immunohistochemical staining of FFPE rat pancreas tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated GNMT expression using an HRP-conjugated detection system with DAB chromogen. Pancreatic acinar cells exhibit moderate predominantly cytoplasmic staining with a finely granular distribution, while surrounding stromal tissue shows minimal background reactivity. The staining pattern supports the use of GNMT Antibody, a Glycine N-Methyltransferase Antibody, for immunohistochemical detection of GNMT expression in rat pancreas tissue.

Description

GNMT Antibody recognizes glycine N-methyltransferase (GNMT), a cytosolic methyltransferase that plays a central role in one-carbon metabolism and the regulation of cellular methylation capacity. GNMT catalyzes the transfer of a methyl group from S-adenosylmethionine to glycine, generating sarcosine and S-adenosylhomocysteine. By controlling the intracellular balance of these metabolites, GNMT helps maintain methyl donor homeostasis and influences numerous methylation-dependent biological processes, including DNA, RNA, protein, and lipid methylation. The enzyme is highly expressed in the liver, where it represents one of the most abundant soluble proteins, but it is also detected in the pancreas, kidney, and other tissues. NSJ Bioreagents provides high-quality GNMT Antibody reagents for researchers investigating hepatic metabolism, methylation pathways, and metabolic regulation.

As a Glycine N-Methyltransferase Antibody target, GNMT serves as an important metabolic regulator linking amino acid metabolism with cellular methylation reactions. The enzyme functions as a key sensor of S-adenosylmethionine availability, helping maintain appropriate methyl donor concentrations while preventing excessive methylation activity. Through these functions, GNMT contributes to folate metabolism, methionine cycling, nucleotide biosynthesis, and epigenetic regulation. Changes in GNMT expression can alter global methylation patterns and influence gene expression, oxidative stress responses, and cellular differentiation. Consequently, a GNMT Antibody is widely used to investigate metabolic homeostasis, liver physiology, and the molecular mechanisms governing one-carbon metabolism.

Loss or reduced expression of GNMT has been associated with numerous human diseases, particularly hepatocellular carcinoma, liver fibrosis, nonalcoholic fatty liver disease, and other chronic liver disorders. Experimental studies have demonstrated that disruption of GNMT activity can lead to abnormal S-adenosylmethionine accumulation, altered DNA methylation, oxidative stress, and increased susceptibility to hepatic injury and tumor development. Beyond liver disease, GNMT has also been investigated in pancreatic cancer, prostate cancer, metabolic syndrome, and disorders involving impaired methylation or amino acid metabolism. As a result, the Glycine N-Methyltransferase Antibody is an important reagent for researchers studying hepatic metabolism, cancer biology, epigenetic regulation, and metabolic disease.

A GNMT Antibody / Glycine N-Methyltransferase Antibody is commonly used to evaluate protein expression and localization in cultured cells and tissue specimens while supporting investigations of one-carbon metabolism, methyl donor regulation, liver function, and disease-associated metabolic remodeling. These studies continue to improve understanding of how methylation pathways influence normal physiology and pathological processes. NSJ Bioreagents provides carefully validated antibodies to support reliable and reproducible detection of GNMT across a broad range of experimental models. A GNMT Antibody / Glycine N-Methyltransferase Antibody is a valuable research reagent for investigating methylation biology, hepatic metabolism, one-carbon metabolism, cancer progression, and metabolic homeostasis.

Explore our Metabolism Antibodies page to discover validated antibodies for GNMT and other proteins involved in one-carbon metabolism, methylation pathways, amino acid metabolism, liver function, and metabolic homeostasis.

Application Notes

Optimal dilution of the GNMT Antibody / Glycine N-Methyltransferase Antibody should be determined by the researcher.

Immunogen

E.coli-derived human Glycine N-Methyltransferase recombinant protein (amino acids M1-V290) was used as the immunogen for the GNMT Antibody.

Storage

After reconstitution, the GNMT Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

GNMT antibody, Glycine N-Methyltransferase antibody, Glycine Methyltransferase antibody, Sarcosine Synthase antibody, Hepatic Glycine N-Methyltransferase antibody, Glycine N-Methyltransferase Enzyme antibody

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