

GAMT Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55119

Specification

GAMT Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host

Clonality Calculated MW Physical State Immunogen

Epitope Specificity

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the RMT2 methyltransferase

family.

DISEASE Defects in GAMT are the cause of quanidinoacetate methyltransferase

deficiency (GAMT deficiency)

[MIM:612736]. GAMT deficiency is an

autosomal recessive disorder characterized by developmental delay/regression, mental retardation, severe disturbance of expressive and cognitive speech, intractable seizures and movement disturbances, severe depletion of creatine/phosphocreatine in the brain, and accumulation of quanidinoacetic acid

KLH conjugated synthetic peptide derived

(GAA) in brain and body fluids.

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

WB, IHC-P, IHC-F, IF, ICC, E

014353

Rabbit

26 KDa

Liquid

laG

Rat, Pig, Dog

101-200/236

from human GAMT

Polyclonal

Background Descriptions

Important Note

In the creatine biosynthesis pathway, glycine is converted to guanidinoacetate by amidinotransferase, and guanidinoacetate is then converted to creatine by Guanidinoacetate N-methyltransferase (GAMT). GAMT, a methyltransferase, uses S-adenosylmethionine as the methyl donor for this reaction. Methyltransferases are a type of transferase enzyme which transfers a methyl group to nucleic bases in DNA or amino acids in protein. Encoding a 236 amino acid protein, the human GAMT gene maps to chromosome 19p13.3. Defects in the GAMT gene leads to GAMT deficiency, which is associated with guanidinoacetate accumulation and decreased levels of creatine excretion in brain. Such biochemical changes are thought to lead to various neurological syndromes and muscular hypotonia.



GAMT Polyclonal Antibody - Additional Information

Gene ID 2593

Other Names

Guanidinoacetate N-methyltransferase, 2.1.1.2, GAMT

Target/Specificity

Expressed in liver.

Dilution

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<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span>
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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.

GAMT Polyclonal Antibody - Protein Information

Name GAMT

Function

Converts guanidinoacetate to creatine, using S- adenosylmethionine as the methyl donor (PubMed:24415674, PubMed:26003046, PubMed:26319512). Important in nervous system development (PubMed:24415674).

Tissue Location

Expressed in liver...

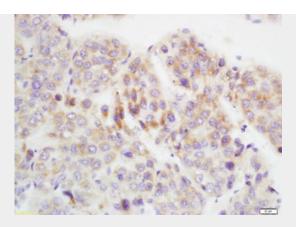
GAMT Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GAMT Polyclonal Antibody - Images





Tissue/cell: Human hepatocellular carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-GMAT Polyclonal Antibody, Unconjugated(bs-13278R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining