

GATM Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10442a

Specification

GATM Antibody (N-term) - Product Information

Application WB, IHC-P,E
Primary Accession P50440

Other Accession <u>P50442</u>, <u>P50441</u>, <u>Q9D964</u>, <u>Q4R806</u>, <u>Q6PH19</u>,

Q9I9K9, Q2HI74, NP 001473.1

Reactivity Human

Predicted Bovine, Chicken, Zebrafish, Monkey,

Mouse, Pig, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 48455
Antigen Region 58-84

GATM Antibody (N-term) - Additional Information

Gene ID 2628

Other Names

Glycine amidinotransferase, mitochondrial, L-arginine:glycine amidinotransferase, Transamidinase, GATM, AGAT

Target/Specificity

This GATM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-84 amino acids from the N-terminal region of human GATM.

Dilution

WB~~1:1000 IHC-P~~1:10~50

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

GATM Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GATM Antibody (N-term) - Protein Information



Name GATM

Synonyms AGAT

Function Transamidinase that catalyzes the transfer of the amidino group of L-arginine onto the amino moiety of acceptor metabolites such as glycine, beta-alanine, gamma-aminobutyric acid (GABA) and taurine yielding the corresponding guanidine derivatives (PubMed:16820567, PubMed:27233232, PubMed:36543883, PubMed:3800397). Catalyzes the rate- limiting step of creatine biosynthesis, namely the transfer of the amidino group from L-arginine to glycine to generate guanidinoacetate, which is then methylated by GAMT to form creatine. Provides creatine as a source for ATP generation in tissues with high energy demands, in particular skeletal muscle, heart and brain (Probable) (PubMed:27233232, PubMed:36543883, PubMed:3800397, PubMed:9266688).

Cellular Location

[Isoform 1]: Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side. Note=Probably attached to the outer side of the inner membrane

Tissue Location

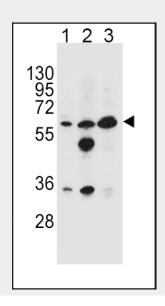
Expressed in brain, heart, kidney, liver, lung, salivary gland and skeletal muscle tissue, with the highest expression in kidney. Biallelically expressed in placenta and fetal tissues

GATM Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

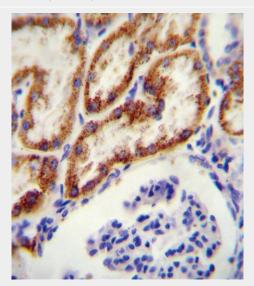
GATM Antibody (N-term) - Images





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GATM Antibody (N-term) (Cat. #AP10442a) western blot analysis in HL-60(lane 1),MDA-MB453(lane 2),K562(lane 3) cell line lysates (35ug/lane).This demonstrates the GATM antibody detected the GATM protein (arrow).



GATM antibody (N-term) (Cat. #AP10442a) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GATM antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.