

Rabbit GATM Polyclonal Antibody | anti-GATM antibody

Anti-GATM Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127141	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

GATM; Polyclonal Antibody; Anti-GATM Antibody Picoband; Glycine amidinotransferase; mitochondrial; glycine amidinotransferase; AGAT; EC 2.1.4.1; L-arginine:glycine amidinotransferase; Transamidinase; anti-GATM antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-GATM antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human GATM recombinant protein (Position: M1-E279). Human GATM shares 95.3% and 95% amino acid (aa) sequence identity with mouse and rat GATM, respectively.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of THP-1 cells using anti-GATM antibody (AAA127141). Overlay histogram showing THP-1 cells stained with AAA127141 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GATM Antibody (AAA127141, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



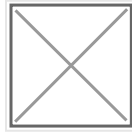
IHC (Immunohistochemistry)

Figure 4. IHC analysis of GATM using anti-GATM antibody (AAA127141). GATM was detected in a paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GATM Antibody (AAA127141) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemisry)

Figure 3. IHC analysis of GATM using anti-GATM antibody (AAA127141).GATM was detected in a paraffin-embedded section of human pancreas cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GATM Antibody (AAA127141) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of GATM using anti-GATM antibody (AAA127141).GATM was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GATM Antibody (AAA127141) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.

WB (Western Blot)

Figure 1. Western blot analysis of GATM using anti-GATM antibody (AAA127141).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human AGS whole cell lysates,Lane 2: human HUH-7 whole cell lysates,Lane 3: rat kidney tissue lysates,Lane 4: rat HBZY-1 whole cell lysates,Lane 5: mouse kidney tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GATM antigen affinity purified polyclonal antibody (#AAA127141) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GATM at approximately 48 kDa. The expected band size for GATM is at 48 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-GATM antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-GATM antibody	Primary Antibodies
References	1. Battini, R., Leuzzi, V., Carducci, C., Tosetti, M., Bianchi, M. C., Item, C. B., Stockler-Ipsiroglu, S., Cioni, G. Creatine depletion in a new case with AGAT deficiency: clinical and genetic study in a large pedigree. Molec. Genet. Metab. 77: 326-331, 2002.2. Bianchi, M. C., Tosetti, M., Fornai, F., Alessandri, M. G., Cipriani, P., De Vito, G., Canapicchi, R. Reversible brain creatine deficiency in two sisters with normal blood creatine level. Ann. Neurol. 47: 511-513, 2000.3. Choe, C., Nabuurs, C., Stockebrand, M. C., Neu, A., Nunes, P., Morellini, F., Sauter, K., Schillemeit, S., Hermans-Borgmeyer, I., Marescau, B., Heerschap, A., Isbrandt, D. L-arginine:glycine amidinotransferase deficiency protects from metabolic syndrome. Hum. Molec. Genet. 22: 110-123, 2013. Note: Erratum: Hum. Molec. Genet.: 22: 4030 only, 2013.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503933
NCBI GeneID	2628
NCBI Accession #	NP_001473.1
NCBI GenBank Nucleotide #	NM_001482.2
UniProt Accession #	P50440 ; Q53EQ4 ; B4DH99 ; B4DPI3
Molecular Weight	423

NCBI Official Full Name	glycine amidinotransferase, mitochondrial
NCBI Official Synonym Full Names	glycine amidinotransferase (L-arginine:glycine amidinotransferase)
NCBI Official Symbol	GATM
NCBI Official Synonym Symbols	AT; AGAT; CCDS3
NCBI Protein Information	glycine amidinotransferase, mitochondrial; transaminidase; L-arginine:glycine amidinotransferase
UniProt Protein Name	Glycine amidinotransferase, mitochondrial
UniProt Gene Name	GATM
UniProt Synonym Gene Names	AGAT
UniProt Entry Name	GATM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gatm-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127141>