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# Rabbit Anti-GATM antibody

SL13296R

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| **Product Name:** | GATM |
| **Chinese Name:** | GATM蛋白抗体 |
| **Alias:** | AGAT; AT; GATM; GATM_HUMAN; Glycine amidinotransferase; Glycine amidinotransferase, mitochondrial; L-arginine:glycine amidinotransferase; mitochondrial; Transamidinase. |
| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Human,Mouse,Rat,Dog,Pig,Zebrafish,Sheep,Cat, |
| **Applications:** | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 44kDa |
| **Cellular localization:** | cytoplasmicThe cell membraneMitochondrion |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated synthetic peptide derived from human GATM:141-240/423 |
| **Lsotype:** | IgG |
| **Purification:** | affinity purified by Protein A |
| **Storage Buffer:** | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| **Storage:** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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. |
| **PubMed:** | PubMed |
| **Product Detail:** | Catalyzes the biosynthesis of guanidinoacetate, the immediate precursor of creatine. Creatine plays a vital role in energy metabolism in muscle tissues. May play a role in embryonic and central nervous system development. May be involved in the response to heart failure by elevating local creatine synthesis. |

**Function:**
Catalyzes the biosynthesis of guanidinoacetate, the immediate precursor of creatine. Creatine plays a vital role in energy metabolism in muscle tissues. May play a role in embryonic and central nervous system development. May be involved in the response to heart failure by elevating local creatine synthesis.

**Subunit:**
Homodimer. There is an equilibrium between the monomeric and dimeric forms, shifted towards the side of the monomer.

**Subcellular Location:**
Mitochondrion inner membrane. Cytoplasm. The mitochondrial form is found in the intermembrane space probably attached to the outer side of the inner membrane.

**Tissue Specificity:**
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.

**DISEASE:**
Defects in GATM are the cause of arginine:glycine amidinotransferase deficiency (AGAT deficiency) [MIM:612718]. AGAT deficiency is an autosomal recessive disorder characterized by developmental delay/regression, mental retardation, severe disturbance of expressive and cognitive speech, and severe depletion of creatine/phosphocreatine in the brain.

**Similarity:**
Belongs to the amidinotransferase family.

**SWISS:**
P50440

**Gene ID:**
2628

**Database links:**

Entrez Gene: 2628Human

Entrez Gene: 67092Mouse

Entrez Gene: 81660Rat

Entrez Gene: 266799Zebrafish

Omim: 602360Human

SwissProt: P50440Human

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| | SwissProt: Q9D964Mouse<br><br>SwissProt: P50442Rat<br><br>SwissProt: Q6PH19Zebrafish<br><br>**Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |