

Product datasheet for CF503147

OriGene Technologies, Inc.

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GATM Mouse Monoclonal Antibody [Clone ID: OTI1C9]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1C9

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human GATM(NP_001473) produced in HEK293

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 44.2 kDa

Gene Name: glycine amidinotransferase

Database Link: NP 001473

Entrez Gene 67092 MouseEntrez Gene 81660 RatEntrez Gene 2628 Human

P50440





Background: This gene encodes a mitochondrial enzyme that belongs to the amidinotransferase family.

This enzyme is involved in creatine biosynthesis, whereby it catalyzes the transfer of a guanido group from L-arginine to glycine, resulting in guanidinoacetic acid, the immediate precursor of creatine. Mutations in this gene cause arginine:glycine amidinotransferase deficiency, an inborn error of creatine synthesis characterized by mental retardation,

language impairment, and behavioral disorders. [provided by RefSeq]

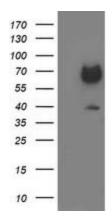
Synonyms: AGAT; AT; CCDS3

Protein Families: Druggable Genome

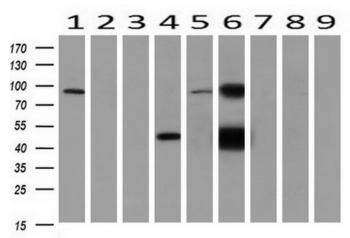
Protein Pathways: Arginine and proline metabolism, Glycine, serine and threonine metabolism, Metabolic

pathways

Product images:

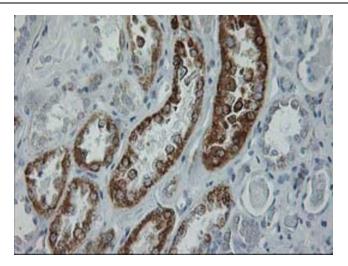


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GATM ([RC200474], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GATM. Positive lysates [LY419923] (100ug) and [LC419923] (20ug) can be purchased separately from OriGene.

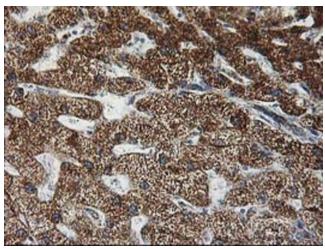


Western blot analysis of extracts (10ug) from 9 Human tissue by using anti-GATM monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon).

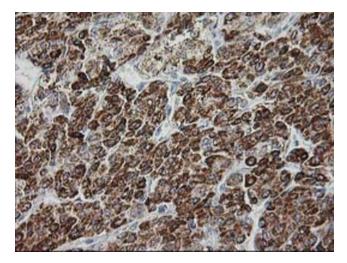




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-GATM mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

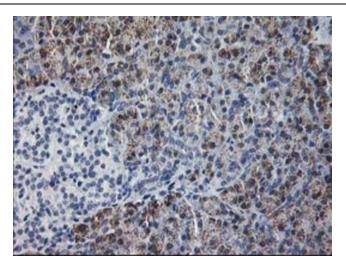


Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-GATM mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

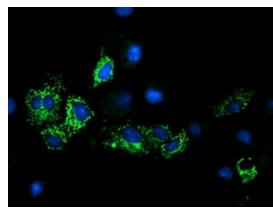


Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-GATM mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

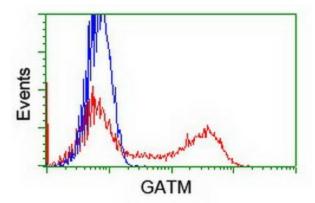




Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-GATM mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-GATM mouse monoclonal antibody ([TA503147]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GATM ([RC200474]).



HEK293T cells transfected with either [RC200474] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-GATM antibody ([TA503147]), and then analyzed by flow cytometry.