Best Tools for immunology Research

GATM rabbit pAb

Catalog No :	YT6448
Reactivity :	Human;Mouse;Rat
Applications :	WB
Target :	GATM
Fields :	>>Glycine, serine and threonine metabolism;>>Arginine and proline metabolism;>>Metabolic pathways
Gene Name :	GATM AGAT
Protein Name :	GATM
Human Gene Id :	2628
Human Swiss Prot No :	P50440
Mouse Gene Id :	67092
Mouse Swiss Prot No :	Q9D964
Rat Gene Id :	81660
Rat Swiss Prot No :	P50442
Immunogen :	Synthesized peptide derived from human GATM AA range: 223-273
Specificity :	This antibody detects endogenous levels of GATM at Human/Mouse/Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1□500-2000

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 47kD

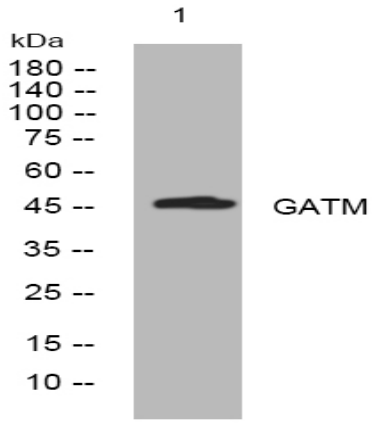
Background : This gene encodes a mitochondrial enzyme that belongs to the amidinotransferase family. This enzyme is involved in creatine biosynthesis, whereby it catalyzes the transfer of a guanido group from L-arginine to glycine, resulting in guanidinoacetic acid, the immediate precursor of creatine. 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, Jul 2008],

Function : catalytic activity:L-arginine + glycine = L-ornithine + guanidinoacetate.,disease:Defects in GATM are the cause of L-arginine:glycine amidinotransferase deficiency (AGAT deficiency) [MIM:602360]. AGAT deficiency is a defect in creatine metabolism leading to mental retardation.,domain:One chain folds into a compact single domain composed of repeating units, five beta-beta-alpha-beta modules, which surround the central active site.,pathway:Amine and polyamine biosynthesis; creatine biosynthesis; creatine from L-arginine and glycine: step 1/2.,similarity:Belongs to the amidinotransferase family.,subcellular location:The mitochondrial form is found in the intermembrane space probably attached to the outer side of the inner membrane.,subunit:Homodimer. There is an equilibrium between the monomeric and dimeric forms, shifted towards the side of the monomer.,tissue specificity:Kidney.,

Subcellular Location : [Isoform 1]: Mitochondrion inner membrane; Peripheral membrane protein; Intermembrane side. Probably attached to the outer side of the inner membrane.; [Isoform 2]: Cytoplasm.

Expression : 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.

Products Images



Western blot analysis of lysates from K562 cells, primary antibody was diluted at 1:1000, 4°over night