Recombinant Human GATM

Cat. No. GATM-28986TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human GATM with an N-terminal proprietary tag; Predicted MW 36.63kDa.
Species	Human
Source	Wheat Germ
ProteinLength	100 amino acids
Description	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.
Molecular Weight	36.630kDa inclusive of tags
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.
Form	Liquid
Purity	Proprietary Purification

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Storage buffer	pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MLRVRCLRGGSRGAEAVHYIGSRLGRTLTGWVQRTFQSTQ AATASSRNSCAADDK ATEPLPKDCPVSSYNEWDPLEEVIV GRAENACVPPFTIEVKANTY
Sequence Similarities	Belongs to the amidinotransferase family.

GENE INFORMATION

Gene Name	GATM glycine amidinotransferase (L-arginine:glycine amidinotransferase) [Homo sapiens]
Official Symbol	GATM
Synonyms	GATM; glycine amidinotransferase (L-arginine:glycine amidinotransferase); glycine amidinotransferase, mitochondrial; AGAT;
Gene ID	2628
mRNA Refseq	NM_001482
Protein Refseq	NP_001473
MIM	602360
Uniprot ID	P50440
Chromosome	15q15.1

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Location	
Pathway	Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Creatine metabolism, organism-specific biosystem; Creatine pathway, organism-specific biosystem; Creatine pathway, conserved biosystem;
Function	glycine amidinotransferase activity; glycine amidinotransferase activity; transferase activity;

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