OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AR50263PU-N Human Glycine amidinotransferase (38-423, His-tag) - Purified

Alternate names: AGAT, GATM, L-arginine:glycine amidinotransferase, Transamidinase

Quantity: 0.25 mg

Concentration: 1mg/ml (determined by Bradford assay)

Background: GATM (Glycine amidinotransferase, mitochondrial) is 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. Creatine plays a vital role in energy metabolism in muscle tissues. It plays a role in embryonic and central nervous system development.

Uniprot ID: P50440

NCBI: NP_001473

GeneID: 2628

Species: Human

Source: E. coli

Format:
State: Liquid purified protein
Purity: >90% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 10% glycerol, 200mM NaCl

Description: Recombinant human GATM protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MGSMSTQAAT ASSRNSCAAD DKATEPLPKD CPVSSYNEWD
PLEEVIVGRA ENACVPPFTI EVKANTYEKY WPFYQKQGGH YFPKDHLKKA VAEIEEMCNI
LKTEGVTVRR PDPIDWSLKY KTPDFESTGL YSAMPRDILI VVGNEIIEAP MAWRSRFFEY
RAYRSIIKDY FHRGAKWTTA PKPTMADELY NQDYPIHSVE DRHKLAAQGK FVTTEFEPCF
DAADFIRAGR DIFAQRSQVT NYLGIEWMRR HLAPDYRVHI ISFKDPNPMH IDATFNIIGP
GIVLSNPDRP CHQIDLFKKA GWTIITPPTP IIPDDHPLWM SSKWLSMNVL MLDEKRVMVD
ANEVPIQKMF EKLGITTIKV NIRNANSLGG GFHCWTCDVR RRGTLQSYLD
Molecular weight: 46.9 kDa (410aa), confirmed by MALDI-TOF (Molecular size on SDS-PAGE will appear higher)

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: Schulze A (2003). Mol. Cell. Biochem. 244 (1-2): 143-50.Cullen M.E., Et al. (2006) Circulation 114:I16-I20