



Recombinant Protein Technical Manual

Recombinant Human GAMT Protein (His Tag)

RPES0220

Product Data:

Product SKU: RPES0220

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q14353

Protein Information:

Molecular Mass: 29.5 kDa

AP Molecular Mass: 30 kDa

Tag: N,C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl,1mMDTT,pH 8.0 .

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Guanidinoacetate N-methyltransferase; GAMT; PIG2;TP53I2

Immunogen Information:

Sequence: Met 1-Gly236

Background:

GAMT is a methyltransferase which belongs to the class I-like SAM-binding methyltransferase superfamily. It contains one RMT2 (arginine N-methyltransferase 2-like) domain and is expressed in liver. GAMT converts guanidoacetate to creatine, using S-adenosylmethionine as the methyl donor. Defects in GAMT are the cause of guanidinoacetate methyltransferase deficiency, which is an autosomal recessive disorder characterized by developmental delay/regression, mental retardation, severe disturbance of expressive and cognitive speech, intractable seizures and movement disturbances, severe depletion of creatine/phosphocreatine in the brain, and accumulation of guanidinoacetic acid in brain and body fluids.