

GCAT, 22-419aa , Human, His tag, E.coli

Cat.NO.: TP02207

3th Edition

Synonyms:Glycine C-acetyltransferase , 2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial, AKB ligase, Aminoacetone synthase, Glycine acetyltransferase, KBL

Description:The degradation of L-threonine to glycine consists of a two-step biochemical pathway involving the enzymes L-threonine dehydrogenase and 2-amino-3-ketobutyrate coenzyme A ligase. L-Threonine is first converted into 2-amino-3-ketobutyrate by L-threonine dehydrogenase. GCAT is the second enzyme in this pathway, which then catalyzes the reaction between 2-amino-3-ketobutyrate and coenzyme A to form glycine and acetyl-CoA. The enzyme is considered a class II pyridoxal-phosphate-dependent aminotransferase. Recombinant human GCAT protein, fused to His-tag at N-terminus, was expressed in E.coli.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Molecular Weight:45.0kDa (419aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMSALAQLRGILEGELEGIRGAGTWSERVITSRQQPHIRVDGVSGGILNFCANNYL
GLSSHPEVIQAGLQALEEFGAGLSSVRFICGTQSIHKNLEAKIARFHQREDAILYPCYDANAGLFEALLTPEDAVLS
DELNHASIIDGIRLCKAHKYRYRHLDMALEAKLQEAQKHRLRLVATDGAFSMDGDIAPLQEICCLASRYGALVFMD
ECHATGFLGPTGRGTDELLGVMDQVTIINSTLGKALGGASGGYTTGPGPLVSLLRQRARPYLFSNSLPPAVVGCAS
KALDLLMGSNTIVQSMAAKTQRFRRSKMEAAGFTISGASHPICPVMLGDARLASRMADDMLKRGIFVIGFSYPVVPKG
KARIRVQISAVHSEEDIDRCVEAFVEVGRHLHGALP

Purity:> 95% by HPLC

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

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.