

## Product datasheet for **TP760122**

### GCAT (NM\_014291) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glycine C-acetyltransferase (2-amino-3-ketobutyrate coenzyme A ligase) (GCAT), nuclear gene encoding mitochondrial protein, full length, with N-terminal HIS tag, expressed in E.Coli, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding human full-length GCAT
Tag:	N-His
Predicted MW:	45.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_055106</a>
Locus ID:	23464
UniProt ID:	<a href="#">O75600</a> , <a href="#">A8K228</a>
RefSeq Size:	1504
Cytogenetics:	22q13.1
RefSeq ORF:	1257
Synonyms:	KBL



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**Summary:**

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. This gene encodes 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 encoded enzyme is considered a class II pyridoxal-phosphate-dependent aminotransferase. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 14. [provided by RefSeq, Jan 2010]

**Protein Pathways:**

Glycine, serine and threonine metabolism

**Product images:**