

GCAT Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12897a**Specification**

GCAT Antibody (N-term) Blocking peptide - Product Information

Primary Accession [O75600](#)

GCAT Antibody (N-term) Blocking peptide - Additional Information

Gene ID 23464

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GCAT Antibody (N-term) Blocking peptide - Protein Information

Name GCAT ([HGNC:4188](#))

Synonyms KBL

Function

Pyridoxal phosphate (PLP) dependent enzyme, which catalyzes the cleavage of 2-amino-3-oxobutanoate to glycine and acetyl-CoA.

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:Q0P5L8}. Nucleus. Note=Translocates to the nucleus upon cold and osmotic stress.

Tissue Location

Strongly expressed in heart, brain, liver and pancreas. Also found in lung.

GCAT Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GCAT Antibody (N-term) Blocking peptide - Images

GCAT Antibody (N-term) Blocking peptide - Background

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.

GCAT Antibody (N-term) Blocking peptide - References

Jacquot, C., et al. Anticancer Res. 22(4):2229-2235(2002) Edgar, A.J., et al. Eur. J. Biochem. 267(6):1805-1812(2000) Tressel, T., et al. J. Biol. Chem. 261(35):16428-16437(1986)