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GCAT Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP7498c

Specification

GCAT Antibody (Center) Blocking Peptide - Product Information

Primary Accession O75600

GCAT Antibody (Center) 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7498c was selected from the Center region of human GCAT. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 (Center) 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.

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GCAT Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

GCAT Antibody (Center) Blocking Peptide - Images

GCAT Antibody (Center) 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. 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.

GCAT Antibody (Center) Blocking Peptide - References

Edgar,A.J., Polak,J.M.Eur. J. Biochem. 267 (6), 1805-1812 (2000)Tressel,T., Thompson,R., J. Biol. Chem. 261 (35), 16428-16437 (1986)