

GCAT Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12897a**Specification**

GCAT Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O75600
Other Accession	Q0P5L8 , NP_055106.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	45285
Antigen Region	101-128

GCAT Antibody (N-term) - 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

This GCAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 101-128 amino acids from the N-terminal region of human GCAT.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GCAT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GCAT Antibody (N-term) - 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

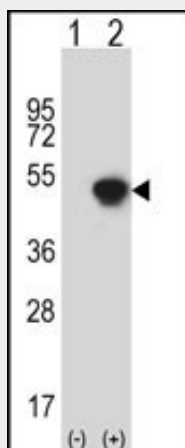
Strongly expressed in heart, brain, liver and pancreas. Also found in lung.

GCAT Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GCAT Antibody (N-term) - Images



Western blot analysis of GCAT (arrow) using rabbit polyclonal GCAT Antibody (N-term) (Cat. #AP12897a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GCAT gene.

GCAT Antibody (N-term) - 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) - 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)