10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GLYAT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13064c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q6IB77
Other Accession	O77512, NP_964011.2, NP_005829.3
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32999
Calculated MW	33924
Antigen Region	171-199

Additional Information

Gene ID	10249
Other Names	Glycine N-acyltransferase, Acyl-CoA:glycine N-acyltransferase, AAc, Aralkyl acyl-CoA N-acyltransferase, Aralkyl acyl-CoA:amino acid N-acyltransferase, Benzoyl-coenzyme A:glycine N-acyltransferase, Glycine N-benzoyltransferase, HRP-1(CLP), GLYAT, ACGNAT, CAT, GAT
Target/Specificity	This GLYAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 171-199 amino acids from the Central region of human GLYAT.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	GLYAT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GLYAT

Synonyms	ACGNAT, CAT, GAT
Function	Mitochondrial acyltransferase which transfers an acyl group to the N-terminus of glycine and glutamine, although much less efficiently. Can conjugate numerous substrates to form a variety of N- acylglycines, with a preference for benzoyl-CoA over phenylacetyl-CoA as acyl donors. Thereby detoxify xenobiotics, such as benzoic acid or salicylic acid, and endogenous organic acids, such as isovaleric acid.
Cellular Location	Mitochondrion.
Tissue Location	Predominantly expressed in liver (at protein level) and kidney. Down-regulated in hepatocellular carcinoma and other liver cancers.

Background

The glycine-N-acyltransferase protein conjugates glycine with acyl-CoA substrates in the mitochondria. The protein is thought to be important in the detoxification of endogenous and xenobiotic acyl-CoA's. Two transcript variants encoding different isoforms have been found for this gene.

References

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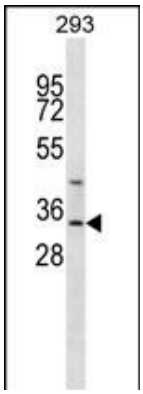
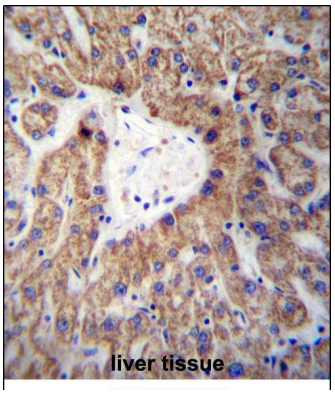
van der Westhuizen, F.H., et al. J. Biochem. Mol. Toxicol. 14(2):102-109(2000)
Mawal, Y., et al. J. Pediatr. 130(6):1003-1007(1997)
Merkler, D.J., et al. Arch. Biochem. Biophys. 330(2):430-434(1996)

Images



GLYAT Antibody (Center) (Cat. #AP13064c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the GLYAT antibody detected the GLYAT protein (arrow).



GLYAT Antibody (Center) (Cat. #AP13064c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GLYAT Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.