

GLYAT (N-12): sc-83833



The Power to Question

BACKGROUND

GLYAT (glycine-N-acyltransferase), also known as GAT, CAT, HRP-1(CLP), Acyl-CoA:glycine N-acyltransferase (AAc) or ACGNAT, is a 296 amino acid mitochondrial acyltransferase that conjugates glycine to acyl-CoA substrates. Existing as two alternatively spliced isoforms, GLYAT may participate in detoxification of endogenous and xenobiotic acyl-CoA and is expressed in human liver at peak levels from 18 months to 40 years. Children under seven months express only five to forty percent of liver GLYAT specific activity, thereby functioning with a lower ability to detoxify their system of certain drugs and xenobiotics. A member of the glycine N-acyltransferase family, GLYAT is encoded by a gene located on human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GLYAT (human) mapping to 11q12.1.

SOURCE

GLYAT (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GLYAT of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83833 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GLYAT (N-12) is recommended for detection of GLYAT of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GLYAT (N-12) is also recommended for detection of GLYAT in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GLYAT siRNA (h): sc-75149, GLYAT shRNA Plasmid (h): sc-75149-SH and GLYAT shRNA (h) Lentiviral Particles: sc-75149-V.

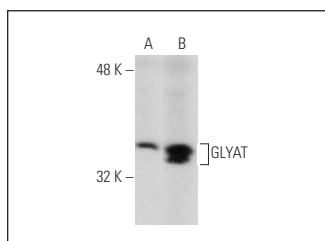
Molecular Weight of GLYAT: 30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Caki-1 cell lysate: sc-2224.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GLYAT (N-12): sc-83833. Western blot analysis of GLYAT expression in Hep G2 (A) and Caki-1 (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.