

GLYAT (C-13): sc-83830

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 7 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.

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CHROMOSOMAL LOCATION

Genetic locus: GLYAT (human) mapping to 11q12.1; Glyat (mouse) mapping to 19 A.

RESEARCH USE

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

SOURCE

GLYAT (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GLYAT of human origin.

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-83830 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GLYAT (C-13) is recommended for detection of GLYAT of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with isoform GLYAT2.

Suitable for use as control antibody for GLYAT siRNA (h): sc-75149, GLYAT siRNA (m): sc-75150, GLYAT shRNA Plasmid (h): sc-75149-SH, GLYAT shRNA Plasmid (m): sc-75150-SH, GLYAT shRNA (h) Lentiviral Particles: sc-75149-V and GLYAT shRNA (m) Lentiviral Particles: sc-75150-V.

Molecular Weight of GLYAT: 34 kDa.

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) 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.