SANTA CRUZ BIOTECHNOLOGY, INC.

PAF acetylhydrolase (G-18): sc-23021

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Platelet Activating Factor (PAF) Acetylhydrolases catalyze hydrolysis of the sn-2 ester bond of PAF and related pro-inflammatory phospholipids and thus attenuate their bioactivity. The family of PAF Acetylhydrolases include one secreted plasma isozyme and four intracellular proteins. The intra-cellular isozymes are distinguished by differences in their primary sequence, tissue localization, subunit composition, and substrate preferences. The most thoroughly characterized intracellular isoform, Ib, contains two homologous (63% identity) catalytic subunits (α1 and α2), which harbor all the enzyme's activity, and a regulatory β subunit. The α subunits readily associate with very high affinity to form homodimers, and this dimerization is essential for both stability and catalytic activity. The b subunit is a product of the LIS1 gene, mutations of which cause Miller-Dieker lissencephaly.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLA2G7 (human) mapping to 6p12.3; Pla2g7 (mouse) mapping to 17 B3.

SOURCE

PAF acetylhydrolase (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of mature chain of PAF acetylhydrolase of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-23021 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PAF acetylhydrolase (G-18) is recommended for detection of precursor and mature chain of PAF acetylhydrolase of mouse, rat 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).

PAF acetylhydrolase (G-18) is also recommended for detection of precursor and mature chain of PAF acetylhydrolase in additional species, including canine and porcine.

Suitable for use as control antibody for PAF Acetylhydrolase siRNA (h): sc-39691, PAF acetylhydrolase siRNA (m): sc-39692, PAF Acetylhydrolase shRNA Plasmid (h): sc-39691-SH, PAF acetylhydrolase shRNA Plasmid (m): sc-39692-SH, PAF Acetylhydrolase shRNA (h) Lentiviral Particles: sc-39691-V and PAF acetylhydrolase shRNA (m) Lentiviral Particles: sc-39692-V.

Molecular Weight of PAF acetylhydrolase: 50 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.

RESEARCH USE

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

PROTOCOLS

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