SANTA CRUZ BIOTECHNOLOGY, INC.

PAF acetylhydrolase 2 (E-15): sc-161983

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PAF acetylhydrolase 2 (platelet-activating factor acetylhydrolase 2), also known as PAFAH2, is a 392 amino acid cytoplasmic protein that belongs to the serine esterase family. PAF acetylhydrolase 2 exists as a monomer that has a marked selectivity for phospholipids with short acyl chains at the sn-2 position. While broadly expressed in many different tissues, PAF acetylhydrolase 2 expression is highest in B- and T-lymphocytes. In brain, PAF acetylhydrolase 2 expression is restricted to amygdala and frontal cortex. The gene that encodes PAF acetylhydrolase 2 consists of approximately 38,391 bases and maps to human chromosome 1p36.11. Comprising nearly 8% of the human genome, chromosome 1 spans 260 million base pairs, contains over 3,000 genes and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

1. Hattori, K., et al. 1996. cDNA cloning and expression of intracellular platelet-activating factor (PAF) acetylhydrolase II. Its homology with plasma PAF acetylhydrolase. J. Biol. Chem. 271: 33032-33038.
2. Stafforini, D.M., et al. 1997. Platelet-activating factor acetylhydrolases. J. Biol. Chem. 272: 17895-17898.
3. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 602344. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.

CHROMOSOMAL LOCATION

Genetic locus: PAFAH2 (human) mapping to 1p36.11; Pafah2 (mouse) mapping to 4 D3.

SOURCE

PAF acetylhydrolase 2 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PAF acetylhydrolase 2 of human origin.

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-161983 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

PAF acetylhydrolase 2 (E-15) is recommended for detection of PAF acetylhydrolase 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with PAF acetylhydrolase.

PAF acetylhydrolase 2 (E-15) is also recommended for detection of PAF acetylhydrolase 2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PAF acetylhydrolase 2 siRNA (h): sc-88153, PAF acetylhydrolase 2 siRNA (m): sc-151991, PAF acetylhydrolase 2 shRNA Plasmid (h): sc-88153-SH, PAF acetylhydrolase 2 shRNA Plasmid (m): sc-151991-SH, PAF acetylhydrolase 2 shRNA (h) Lentiviral Particles: sc-88153-V and PAF acetylhydrolase 2 shRNA (m) Lentiviral Particles: sc-151991-V.

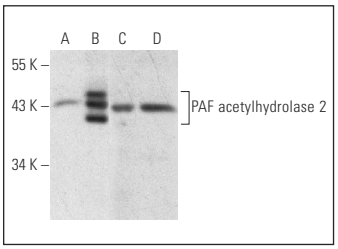
Molecular Weight of PAF acetylhydrolase 2: 43 kDa.

Positive Controls: PAF acetylhydrolase 2 (h): 293T Lysate: sc-172325, KNRK whole cell lysate: sc-2214 or MDA-MB-435S whole cell lysate: sc-364184.

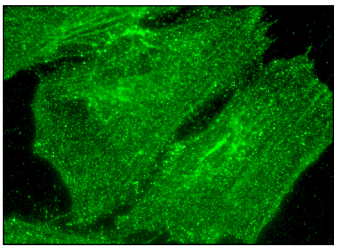
RECOMMENDED SECONDARY REAGENTS

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



PAF acetylhydrolase 2 (E-15): sc-161983. Western blot analysis of PAF acetylhydrolase 2 expression in non-transfected 293T: sc-117752 (**A**), human PAF acetylhydrolase 2 transfected 293T: sc-172325 (**B**), MDA-MB-435S (**C**) and KNRK (**D**) whole cell lysates.



PAF acetylhydrolase 2 (E-15): sc-161983. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

RESEARCH USE

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