

PAF acetylhydrolase 2 (h): 293T Lysate: sc-172325

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

- Hattori, K., Adachi, H., Matsuzawa, A., Yamamoto, K., Tsujimoto, M., Aoki, J., Hattori, M., Arai, H. and Inoue, K. 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.
- Stafforini, D.M., McIntyre, T.M., Zimmerman, G.A. and Prescott, S.M. 1997. Platelet-activating factor acetylhydrolases. *J. Biol. Chem.* 272: 17895-17898.
- 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/>
- Tayebi, N., Callahan, M., Madike, V., Stubblefield, B.K., Orvisky, E., Krasnewich, D., Fillano, J.J. and Sidransky, E. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
- Plasilova, M., Russell, A.M., Wanner, A., Wolf, A., Dobbie, Z., Müller, H.J. and Heinemann, K. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
- Unno, N., Sakaguchi, T., Nakamura, T., Yamamoto, N., Sugatani, J., Miwa, M. and Konno, H. 2006. A single nucleotide polymorphism in the plasma PAF acetylhydrolase gene and risk of atherosclerosis in Japanese patients with peripheral artery occlusive disease. *J. Surg. Res.* 134: 36-43.
- Umemura, K., Kato, I., Hirashima, Y., Ishii, Y., Inoue, T., Aoki, J., Kono, N., Oya, T., Hayashi, N., Hamada, H., Endo, S., Oda, M., Arai, H., Kinouchi, H. and Hiraga, K. 2007. Neuroprotective role of transgenic PAF-acetylhydrolase II in mouse models of focal cerebral ischemia. *Stroke* 38: 1063-1068.
- Betarbet, R., Anderson, L.R., Gearing, M., Hodges, T.R., Fritz, J.J., Lah, J.J. and Levey, A.I. 2008. Fas-associated factor 1 and Parkinson's disease. *Neurobiol. Dis.* 31: 309-315.

CHROMOSOMAL LOCATION

Genetic locus: PAFAH2 (human) mapping to 1p36.11.

PRODUCT

PAF acetylhydrolase 2 (h): 293T Lysate represents a lysate of human PAF acetylhydrolase 2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PAF acetylhydrolase 2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PAF acetylhydrolase 2 antibodies. Recommended use: 10-20 µl per lane.

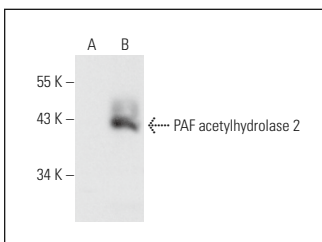
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PAF acetylhydrolase 2 (B-6): sc-390508 is recommended as a positive control antibody for Western Blot analysis of enhanced human PAF acetylhydrolase 2 expression in PAF acetylhydrolase 2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PAF acetylhydrolase 2 (B-6): sc-390508. Western blot analysis of PAF acetylhydrolase 2 expression in non-transfected: sc-117752 (A) and human PAF acetylhydrolase 2 transfected: sc-172325 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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