

PAFAH1B2 (A-6): sc-393216

BACKGROUND

PAFAH1B2 (platelet-activating factor acetylhydrolase IB subunit β), also known as PAFAHB, is a 229 amino acid cytoplasmic protein that belongs to the GDSL lipolytic enzyme family and the platelet-activating factor acetylhydrolase IB β/γ subunits subfamily. A ubiquitously expressed catalytic subunit of the cytosolic PAFAH1B heterotrimeric complex, PAFAH1B2 inactivates PAF by removing the acetyl group at the sn-2 position. Along with the β subunit, PAFAH1B is made up of α and γ subunits. The gene that encodes PAFAH1B2 consists of approximately 32,628 bases and maps to human chromosome 11q23.3. Chromosome 11 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 map to chromosome 11.

REFERENCES

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- Moro, F., et al. 1998. The β and γ subunits of the human platelet-activating factor acetyl hydrolase isoform Ib (PAFAH1B2 and PAFAH1B3) map to chromosome 11q23 and 19q13.1, respectively. *Genomics* 51: 157-159.
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- Sweeney, K.J., et al. 2000. Lissencephaly associated mutations suggest a requirement for the PAFAH1B heterotrimeric complex in brain development. *Mech. Dev.* 92: 263-271.
- Sheffield, P.J., et al. 2001. Preparation and crystal structure of the recombinant α_1/α_2 catalytic heterodimer of bovine brain platelet-activating factor acetylhydrolase Ib. *Protein Eng.* 14: 513-519.

CHROMOSOMAL LOCATION

Genetic locus: PAFAH1B2 (human) mapping to 11q23.3; Pafah1b2 (mouse) mapping to 9 A5.2.

SOURCE

PAFAH1B2 (A-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 10-31 near the N-terminus of PAFAH1B2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-393216 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

PAFAH1B2 (A-6) is recommended for detection of PAFAH1B2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PAFAH1B2 siRNA (h): sc-96312, PAFAH1B2 siRNA (m): sc-151992, PAFAH1B2 shRNA Plasmid (h): sc-96312-SH, PAFAH1B2 shRNA Plasmid (m): sc-151992-SH, PAFAH1B2 shRNA (h) Lentiviral Particles: sc-96312-V and PAFAH1B2 shRNA (m) Lentiviral Particles: sc-151992-V.

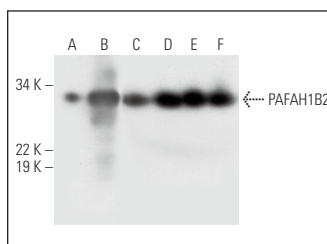
Molecular Weight of PAFAH1B2: 30 kDa.

Positive Controls: PAFAH1B2 (m): 293T Lysate: sc-122352, mouse brain extract: sc-2253 or human testis extract: sc-363781.

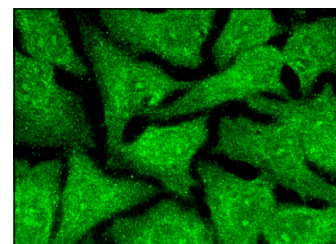
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PAFAH1B2 (A-6): sc-393216. Western blot analysis of PAFAH1B2 expression in non-transfected 293T: sc-117752 (A), mouse PAFAH1B2 transfected 293T: sc-122352 (B) and Hep G2 (C) whole cell lysates and mouse brain (D), human hippocampus (E) and human testis (F) tissue extracts.



PAFAH1B2 (A-6): sc-393216. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic, nuclear and nucleolar localization.

STORAGE

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

RESEARCH USE

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