

PPAN (C-7): sc-398273

BACKGROUND

PPAN (peter pan homolog), also known as Ssf-1 (suppressor of SWI4 1 homolog) or brix domain-containing protein 3, is a 473 amino acid protein that contains one Brix domain and exists as two alternatively spliced isoforms. Containing 12 exons, PPAN contains 2 characteristic CpG islands upstream of exon 1 and exon 6, with both islands having TATA elements nearby, which suggests that PPAN possesses 2 potential promoter regions. Encoded by a gene that maps to human chromosome 19p13.2, PPAN localizes to nucleus and is ubiquitously expressed, with highest levels in heart, skeletal muscle, kidney and liver. PPAN functions as a putative tumor suppressor in HF cells, nontransformed revertants of HeLa cells. Upregulated expression of PPAN in myeloid leukemia cells occurs in response to granulocyte-colony stimulating factor and dibutyryl-cAMP. PPAN may also play a role in cell growth.

REFERENCES

- Migeon, J.C., et al. 1999. Cloning and characterization of peter pan, a novel *Drosophila* gene required for larval growth. *Mol. Biol. Cell* 10: 1733-1744.
- Suarez-Huerta, N., et al. 2000. Cloning, genomic organization, and tissue distribution of human Ssf-1. *Biochem. Biophys. Res. Commun.* 275: 37-42.
- Welch, P.J., et al. 2000. Identification and validation of a gene involved in anchorage-independent cell growth control using a library of randomized hairpin ribozymes. *Genomics* 66: 274-283.

CHROMOSOMAL LOCATION

Genetic locus: PPAN (human) mapping to 19p13.2; Ppan (mouse) mapping to 9 A3.

SOURCE

PPAN (C-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 422-445 near the C-terminus of PPAN of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PPAN (C-7) is available conjugated to agarose (sc-398273 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398273 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398273 PE), fluorescein (sc-398273 FITC), Alexa Fluor® 488 (sc-398273 AF488), Alexa Fluor® 546 (sc-398273 AF546), Alexa Fluor® 594 (sc-398273 AF594) or Alexa Fluor® 647 (sc-398273 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398273 AF680) or Alexa Fluor® 790 (sc-398273 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398273 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

PPAN (C-7) is recommended for detection of PPAN of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for PPAN siRNA (h): sc-97093, PPAN siRNA (m): sc-152401, PPAN shRNA Plasmid (h): sc-97093-SH, PPAN shRNA Plasmid (m): sc-152401-SH, PPAN shRNA (h) Lentiviral Particles: sc-97093-V and PPAN shRNA (m) Lentiviral Particles: sc-152401-V.

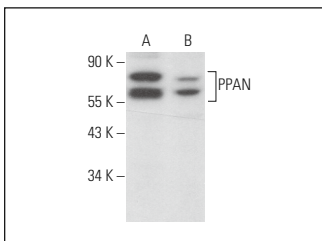
Molecular Weight of PPAN isoforms: 53/52 kDa.

Positive Controls: SJRH30 cell lysate: sc-2287, A-10 cell lysate: sc-3806 or human heart extract: sc-363763.

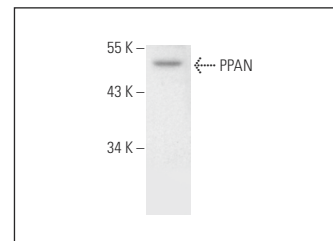
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



PPAN (C-7): sc-398273. Western blot analysis of PPAN expression in SJRH30 (A) and A-10 (B) whole cell lysates.



PPAN (C-7): sc-398273. Western blot analysis of PPAN expression in human heart tissue extract.

SELECT PRODUCT CITATIONS

- Ruan, W., et al. 2020. Intranasal wnt-3a alleviates neuronal apoptosis in early brain injury post subarachnoid hemorrhage via the regulation of wnt target PPAN mediated by the moonlighting role of Aldolase C. *Neurochem. Int.* 134: 104656.

RESEARCH USE

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

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