

PPAN (D-17): sc-162028

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

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2. Suarez-Huerta, N., et al. 2000. Cloning, genomic organization, and tissue distribution of human Ssf-1. *Biochem. Biophys. Res. Commun.* 275: 37-42.
3. 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.
4. Becker, S., et al. 2001. The black-pearl gene of *Drosophila* defines a novel conserved protein family and is required for larval growth and survival. *Gene* 262: 15-22.
5. Communi, D., et al. 2001. Cotranscription and intergenic splicing of human P2Y11 and SSF1 genes. *J. Biol. Chem.* 276: 16561-16566.
6. Eisenhaber, F., et al. 2001. The Brix domain protein family—a key to the ribosomal biogenesis pathway? *Trends Biochem. Sci.* 26: 345-347.
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CHROMOSOMAL LOCATION

Genetic locus: PPAN/PPAN-P2RY11 (human) mapping to 19p13.2; Ppan (mouse) mapping to 9 A3.

SOURCE

PPAN (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PPAN 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.

PROTOCOLS

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

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-162028 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PPAN (D-17) is recommended for detection of PPAN and PPAN-P2RY11 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).

PPAN (D-17) is also recommended for detection of PPAN and PPAN-P2RY11 in additional species, including canine, bovine and porcine.

Molecular Weight of PPAN isoforms: 53/52 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.