

PRPSAP1 (K-12): sc-107973

BACKGROUND

Phosphoribosylpyrophosphate (PRPP) is an essential substrate and critical control factor for the synthesis of purine and pyrimidine nucleotides, histidine, tryptophan and NAD. The formation of phosphoribosylpyrophosphate from ATP and ribose-5-phosphate is catalyzed by the enzyme phosphoribosylpyrophosphate synthetase (PRS), which exists as a complex with two catalytic subunits, PRPS1 and PRPS2, and two associated subunits, PRPSAP1 and PRPSAP2. PRPSAP1 (phosphoribosyl pyrophosphate synthetase-associated protein 1), also known as PAP39, is a 356 amino acid ubiquitous protein belonging to the ribose-phosphate pyrophosphokinase family. PRPSAP1 may play a negative regulatory role in 5-phosphoribose 1-diphosphate synthesis and is encoded by a gene mapping to human chromosome 17q25.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRPSAP1 (human) mapping to 17q25.1; Prpsap1 (mouse) mapping to 11 E2.

SOURCE

PRPSAP1 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRPSAP1 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-107973 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRPSAP1 (K-12) is recommended for detection of PRPSAP1 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).

PRPSAP1 (K-12) is also recommended for detection of PRPSAP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRPSAP1 siRNA (h): sc-93758, PRPSAP1 siRNA (m): sc-152503, PRPSAP1 shRNA Plasmid (h): sc-93758-SH, PRPSAP1 shRNA Plasmid (m): sc-152503-SH, PRPSAP1 shRNA (h) Lentiviral Particles: sc-93758-V and PRPSAP1 shRNA (m) Lentiviral Particles: sc-152503-V.

Molecular Weight of PRPSAP1: 41 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.

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.

PROTOCOLS

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