SANTA CRUZ BIOTECHNOLOGY, INC.

PTPN21 (S-18): sc-82724

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The protein tyrosine phosphatase (PTP) family of proteins are signaling molecules that regulate processes such as cell growth, cell differentiation, oncogenic transformation and the mitotic cycle. PTPN21 (protein tyrosine phosphatase, non-receptor type 21), also known as PTPD1 or PTPRL10, is a 1,174 amino acid member of the PTP family and localizes to both the cytoplasm and the cytoskeleton. Containing one FERM domain and one tyrosine-protein phosphatase domain, PTPN21 functions to catalyze the water-dependent conversion of a protein tyrosine phosphate into a protein tyrosine and a free phosphate and, via this catalytic activity, may be involved in liver regeneration and spermatogenesis. The gene encoding PTPN21 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PTPN21 (human) mapping to 14q31.3; Ptpn21 (mouse) mapping to 12 E.

SOURCE

PTPN21 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PTPN21 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-82724 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PTPN21 (S-18) is recommended for detection of PTPN21 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).

PTPN21 (S-18) is also recommended for detection of PTPN21 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PTPN21 siRNA (h): sc-76291, PTPN21 siRNA (m): sc-76292, PTPN21 shRNA Plasmid (h): sc-76291-SH, PTPN21 shRNA Plasmid (m): sc-76292-SH, PTPN21 shRNA (h) Lentiviral Particles: sc-76291-V and PTPN21 shRNA (m) Lentiviral Particles: sc-76292-V.

Molecular Weight of PTPN21: 130 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.