

PTP-PEST (H-130): sc-134473

BACKGROUND

Protein tyrosine phosphatases (PTPs) and protein tyrosine kinases (PTKs) play an ubiquitous role in the regulation of tyrosine phosphorylation-mediated signaling pathways. Tyrosine-phosphorylated proteins can be dephosphorylated through the action of PTPs, which are likely to play a regulatory role in the control of cellular growth and differentiation. The gene encoding human PTP-PEST maps to chromosome 7q11.23 and encodes a 780 amino acid cytosolic nonreceptor protein. PTP-PEST is expressed abundantly in a wide variety of hemopoietic cell types, including B cells and T cells. PTP-PEST may constitutively associate with several signalling molecules, including Shc, paxillin, Csk and Cas. In addition, PTP-PEST can induce dephosphorylation of Shc, Pyk2, Fak and Cas, and inactivate the Ras pathway. Dephosphorylation of c-Abl by PTP-PEST represents a novel mechanism by which c-Abl activity is regulated. PTP-PEST can also influence cytoskeletal organization by promoting the turnover of focal adhesions required for cell migration, and through regulation of the proline, serine, threonine phosphatase interacting protein (PSTPIP)-mediated cleavage furrow formation or disassembly during normal cell division.

CHROMOSOMAL LOCATION

Genetic locus: PTPN12 (human) mapping to 7q11.23; Ptpn12 (mouse) mapping to 5 A3.

SOURCE

PTP-PEST (H-130) is a rabbit polyclonal antibody raised against amino acids 296-425 mapping within an internal region of PTP-PEST 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.

APPLICATIONS

PTP-PEST (H-130) is recommended for detection of PTP-PEST of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

PTP-PEST (H-130) is also recommended for detection of PTP-PEST in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PTP-PEST siRNA (h): sc-39207, PTP-PEST siRNA (m): sc-39208, PTP-PEST shRNA Plasmid (h): sc-39207-SH, PTP-PEST shRNA Plasmid (m): sc-39208-SH, PTP-PEST shRNA (h) Lentiviral Particles: sc-39207-V and PTP-PEST shRNA (m) Lentiviral Particles: sc-39208-V.

Molecular Weight of mouse PTP-PEST: 120 kDa.

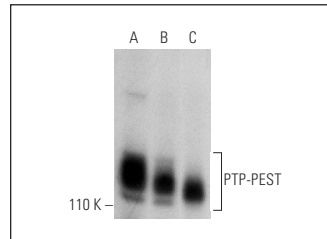
Molecular Weight of human PTP-PEST: 100 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, HeLa whole cell lysate: sc-2200 or THP-1 cell lysate: sc-2238.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PTP-PEST (H-130): sc-134473. Western blot analysis of PTP-PEST expression in SK-N-SH (A), HeLa (B) and THP-1 (C) whole cell lysates.

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.


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Satisfaction
Guaranteed

Try **PTP-PEST (H-11): sc-271351** or **PTP-PEST (AG25): sc-65229**, our highly recommended monoclonal alternatives to PTP-PEST (H-130).