SANTA CRUZ BIOTECHNOLOGY, INC.

# PTP-PEST (M-20): sc-8228

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Protein tyrosine phosphorylation plays a key role in the regulation of several fundamental cellular processes, including cell growth, migration and differentiation. The regulation of phosphorylation is controlled by the opposing actions of protein tyrosine kinases and protein tyrosine phosphatase. BDP1 (brain derived phosphatase 1) is a member of the PEST protein tyrosine phosphatase family. The expression of BDP1 is not limited to the brain, but is also detectable in colon and several tumor-derived cell lines. BDP1 has been shown to differentially dephosphorylate autophosphorylated tyrosine kinases, such as src and EGFR, that are overexpressed in tumor tissues.

## REFERENCES


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2. Walton, K.M. and Dixon, J.E. 1993. Protein tyrosine phosphatases. Ann. Rev. Biochem. 62: 101-120.
3. Kim, Y.W., Wang, H., Sures, I., Lammers, R., Martell, K.J. and Ullrich, A. 1996. Characterization of the PEST family protein tyrosine phosphatase BDP1. Oncogene 13: 2275-2279.
4. Van Vactor, D., O'Reilly, A.M. and Neel, B.G. 1998. Genetic analysis of protein tyrosine phosphatases. Curr. Opin. Genet. Dev. 8: 112-126.
5. Tamir, I. and Cambier, J.C. 1998. Antigen receptor signaling: integration of protein tyrosine kinase functions. Oncogene 17: 1353-1364.


## CHROMOSOMAL LOCATION

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

## SOURCE

PTP-PEST (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PTP-PEST of mouse 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-8228 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

PTP-PEST (M-20) 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).

PTP-PEST (M-20) is also recommended for detection of PTP-PEST in additional species, including equine, canine, bovine and avian.

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.

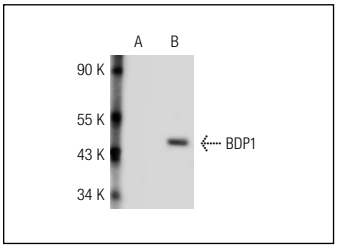
Molecular Weight of human PTP-PEST: 100 kDa.

Positive Controls: BDP1 (m): 293T Lysate: sc-118795.

## 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.

## DATA




PTP-PEST (M-20): sc-8228. Western blot analysis of BDP1 expression in non-transfected: sc-117752 (**A**) and mouse BDP1 transfected: sc-118795 (**B**) 293T whole cell lysates.

## RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **PTP-PEST (H-11): sc-271351** or **PTP-PEST (AG25): sc-65229,** our highly recommended monoclonal alternatives to PTP-PEST (M-20).