Technical Data Sheet

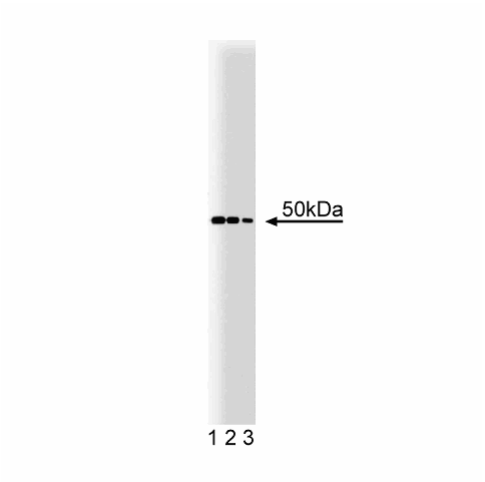
Purified Mouse Anti-PTP1B

Product Information

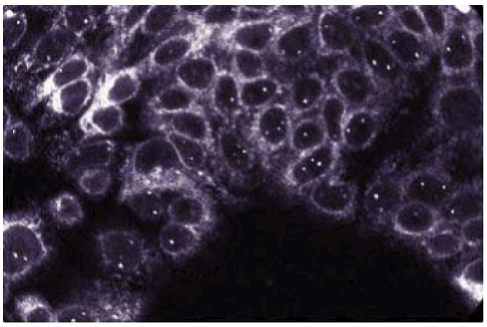
Material Number:	**610140**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	15/PTP1B
Immunogen:	Human PTP1B aa. 269-435
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse, Chicken, Frog
Target MW:	50 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

PTP1B is a member of the class of enzymes termed protein tyrosine phosphatases (PTPs). This 50 kDa protein contains a conserved phosphatases domain at residues 30-278 and is localized to the cytoplasmic face of the endoplasmic reticulum by its C-terminal 35 residues. Its interactions with other proteins are mediated by proline-rich regions and SH2 compatible sequences. PTP1B is thought to act as a negative regulator in insulin signaling. Insulin stimulation induces its association with the insulin receptor and tyrosine phosphorylation. Its overexpression inhibits proximal and distal insulin signaling events, possibly due to receptor dephosphorylation. Microinjection of PTP1B into *Xenopus* oocytes blocks insulin-induced maturation. Additional studies demonstrate that PTP1B undergoes cell cycle-dependent and/or stress-induced serine phosphorylation. This suggests further regulatory roles that are not yet defined.



Western blot analysis of PTP1B on SW13 lysate. *Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of PTP1B.*



HCT-8

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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