

Product datasheet

Anti-PTP1B antibody [EPR1836(2)] ab133244

KO VALIDATED

Recombinant

RabMAb

★★★★★ [1 Abreviews](#) [1 References](#) [3 Images](#)

Overview

Product name	Anti-PTP1B antibody [EPR1836(2)]
Description	Rabbit monoclonal [EPR1836(2)] to PTP1B
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human PTP1B aa 350-450. The exact sequence is proprietary. Database link: P18031
Positive control	TF1; Jurkat; HepG2 and HeLa cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant

Clonality	Monoclonal
Clone number	EPR1836(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133244 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

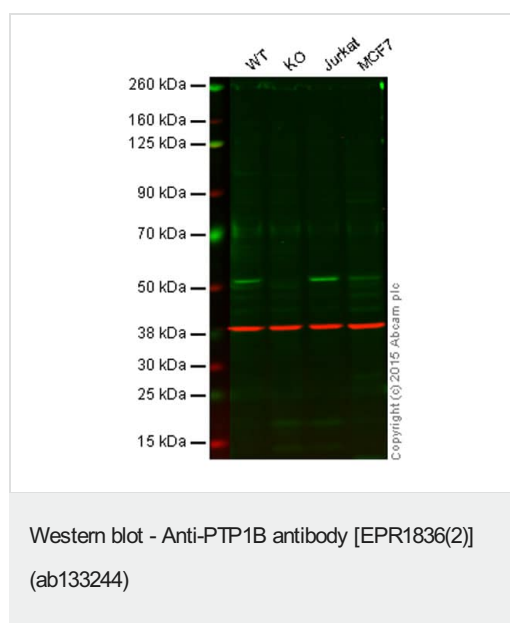
Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 50 kDa.

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function	May play an important role in CKII- and p60c-src-induced signal transduction cascades.
Sequence similarities	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 1 subfamily. Contains 1 tyrosine-protein phosphatase domain.
Post-translational modifications	Oxidized on Cys-215; the Cys-SOH formed in response to redox signaling reacts with the alpha-amido of the following residue to form a 4-amino-3-isothiazolidinone serine cross-link, triggering a conformational change that inhibits substrate binding and activity. The active site can be restored by reduction.
Cellular localization	Endoplasmic reticulum membrane.

Images



Lane 1: Wild-type HAP1 cell lysate (20 µg)

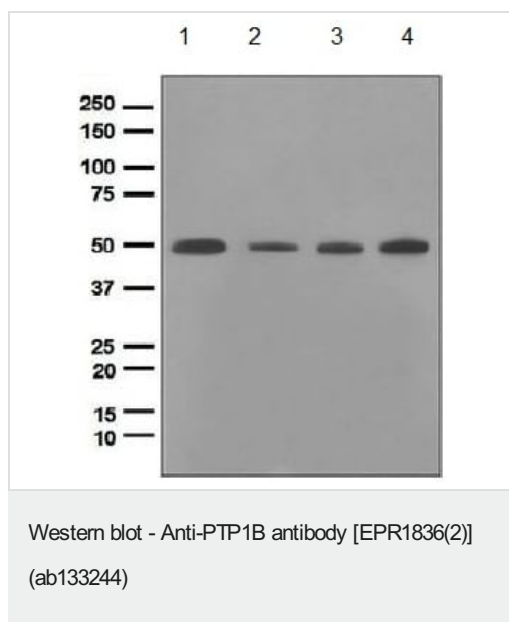
Lane 2: PTP1B knockout HAP1 cell lysate (20 µg)

Lane 3: Jurkat cell lysate (20 µg)

Lane 4: MCF7 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133244 observed at 54 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab133244 was shown to recognize PTP1B when PTP1B knockout samples were used, along with additional cross-reactive bands. Wild-type and PTP1B knockout samples were subjected to SDS-PAGE. ab133244 and **ab8245** (loading control to GAPDH) were diluted 1/1,000 and 1/2,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-PTP1B antibody [EPR1836(2)] (ab133244) at 1/1000 dilution

Lane 1 : TF1 cell lysate

Lane 2 : Jurkat cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 50 kDa

Why choose a recombinant antibody?

Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-PTP1B antibody [EPR1836(2)] (ab133244)

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