

Anti-PTP1B antibody [EP1841Y] ab75856

敲除验证
重组
RabMAb

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概述

产品名称	Anti-PTP1B抗体[EP1841Y]
描述	兔单克隆抗体[EP1841Y] to PTP1B
宿主	Rabbit
特异性	ab75856 detects both phosphorylated and nonphosphorylated PTP1B.
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF 不适用于: IP
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, HepG2 or Jurkat whole cell lysate (ab7899). IHC-P: Human tonsil tissue. Flow Cyt (intra): Jurkat cells. ICC/IF: HeLa cells
常规说明	<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>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant</p>

纯度	Protein A purified
克隆	单克隆
克隆编号	EP1841Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab75856于以下的经测试应用

“应用说明”部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

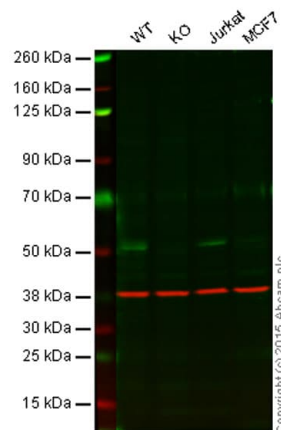
应用	Ab评论	说明
Flow Cyt (Intra)		1/20. <u>ab172730</u> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/2000. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/500.

应用说明 Is unsuitable for IP.

靶标

功能	May play an important role in CKII- and p60c-src-induced signal transduction cascades.
序列相似性	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 1 subfamily. Contains 1 tyrosine-protein phosphatase domain.
翻译后修饰	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.
细胞定位	Endoplasmic reticulum membrane.

图片



Western blot - Anti-PTP1B antibody [EP1841Y]
(ab75856)

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

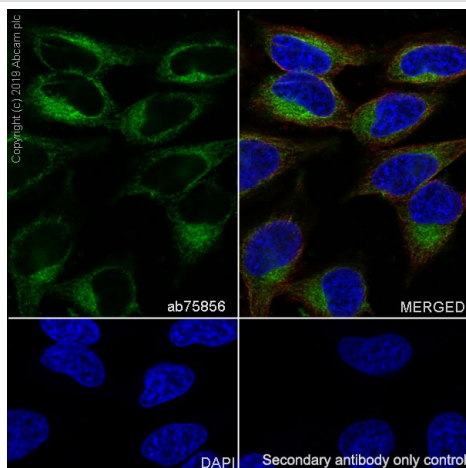
Lane 2: PTPB1 knockout HAP1 cell lysate (20 µg)

Lane 3: Jurkat cell lysate (20 µg)

Lane 4: MCF7 cell lysate (20 µg)

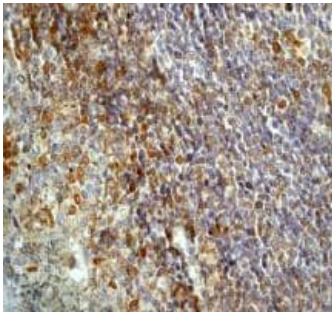
Lanes 1 - 4: Merged signal (red and green). Green - ab75856 observed at 54 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab75856 was shown to specifically react with PTP1B when PTP1B knockout samples were used. Wild-type and ProteinX knockout samples were subjected to SDS-PAGE. ab75856 and **ab8245** (loading control to GAPDH) were diluted 1/1000 and 1/2000 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 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-PTP1B antibody [EP1841Y] (ab75856)

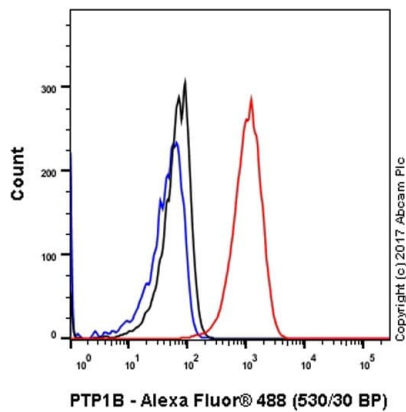
Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling PTP1B with purified ab75856 at 1/500 dilution (5.3 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL) was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PTP1B antibody [EP1841Y] (ab75856)

ab75856, at 1/50 dilution, staining PTP1B in human tonsil, by Immunohistochemistry using formalin-fixed, paraffin-embedded tissue.

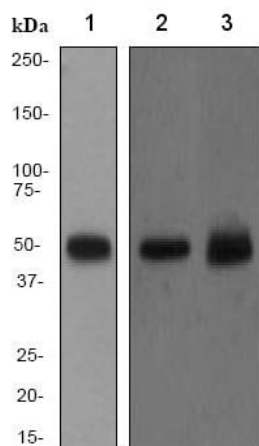
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-PTP1B antibody [EP1841Y] (ab75856)

Intracellular Flow Cytometry analysis of Jurkat cells labelling PTP1B with ab75856 at 1/2000 (red). Cells were fixed with 90% methanol.

ab150077, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG (**ab172730**). Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-PTP1B antibody [EP1841Y] (ab75856)

All lanes : Anti-PTP1B antibody [EP1841Y] (ab75856) at 1/2000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : HepG2 cell lysate

Lane 3 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/1000 dilution

Predicted band size: 50 kDa

Observed 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 [EP1841Y] (ab75856)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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