

### Anti-PTP1B antibody [EP1841Y] ab75856

KO 評価済 リコンビナント RabMAb

4 References 画像数 6

#### 製品の概要

製品名	Anti-PTP1B antibody [EP1841Y]
製品の詳細	Rabbit monoclonal [EP1841Y] to PTP1B
由来種	Rabbit
特異性	ab75856 detects both phosphorylated and nonphosphorylated PTP1B.
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF <b>適用なし:</b> IP
種交差性	<b>交差種:</b> Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HeLa, HepG2 or Jurkat whole cell lysate ( <a href="#">ab7899</a> ). IHC-P: Human tonsil tissue. Flow Cyt (intra): Jurkat cells. ICC/IF: HeLa cells
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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>

#### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP1841Y
アイソタイプ	IgG

## アプリケーション

**The Abpromise guarantee** Abpromise保証は、次のテスト済みアプリケーションにおけるab75856の使用に適用されます  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

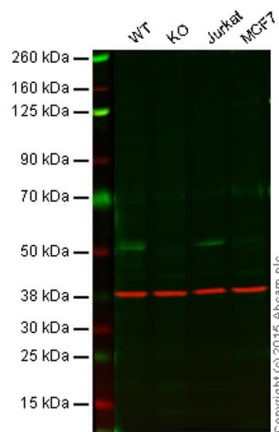
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/20. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/2000. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/500.

**追加情報** Is unsuitable for IP.

## ターゲット情報

<b>機能</b>	May play an important role in CKII- and p60c-src-induced signal transduction cascades.
<b>配列類似性</b>	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 1 subfamily. Contains 1 tyrosine-protein phosphatase domain.
<b>翻訳後修飾</b>	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.
<b>細胞内局在</b>	Endoplasmic reticulum membrane.

## 画像



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

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

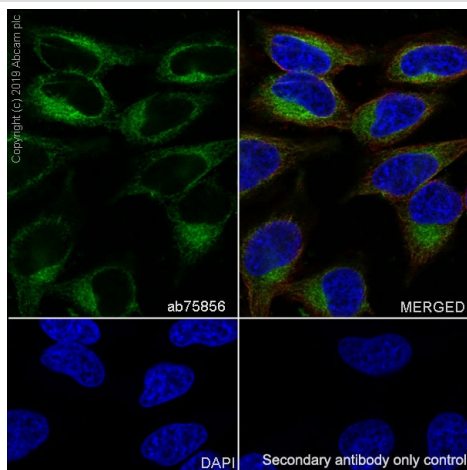
**Lane 2:** PTP1B knockout HAP1 cell lysate (20 µg)

**Lane 3:** Jurkat cell lysate (20 µg)

**Lane 4:** MCF7 cell lysate (20 µg)

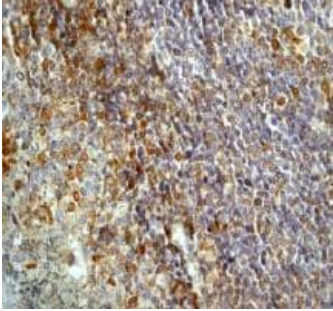
**Lanes 1 - 4:** Merged signal (red and green). Green - ab75856 observed at 54 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

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)

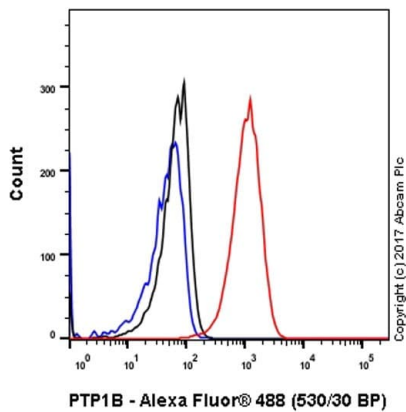
Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling PTP1B with purified ab75856 at 1/500 dilution (5.3 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** 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)

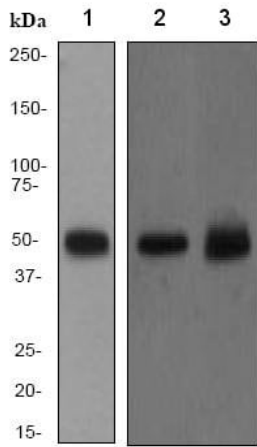
ab75856, at 1/50 dilution, staining PTP1B in human tonsil, by Immunohistochemistry using formalin-fixed, paraffin-embedded tissue.

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?



Anti-PTP1B antibody [EP1841Y] (ab75856)

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

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