abcam

Product datasheet

Anti-Acid phosphatase antibody [EPR21787] ab235448

敲除验证 重组 RabMAb

10 图像

概述

产品名称	Anti-Acid phosphatase抗体[EPR21787]
描述	兔单克隆抗体[EPR21787] to Acid phosphatase
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HepG2, SH-SY5Y, HCT 116, Jurkat, HeLa, C6 and NIH/3T3 whole cell lysates; human placenta and colon lysates. IP: HeLa whole cell lysate. IHC-P: Human colon cancer tissue; mouse colon tissue; rat colon tissue. ICC/IF: HeLa and HepG2 cells. Flow Cyt (intra): HeLa cells.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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 long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR21787

同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用**ab235448**于以下的**经测试应用

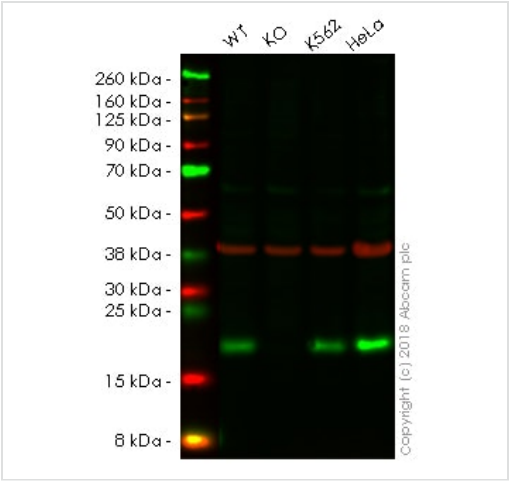
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/50.
WB		1/1000. Detects a band of approximately 18 kDa (predicted molecular weight: 18 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/30.

靶标

相关性	Acid phosphatases (AP) dephosphorylate phosphate groups from phosphate esters under acid conditions. Different acid phosphatase isozymes are found in different organs, and their serum levels are used as a diagnostic for disease in the corresponding organs. Elevated prostatic acid phosphatase levels may indicate the presence of prostate cancer and elevated tartrate-resistant acid phosphatase levels may indicate bone disease.
细胞定位	ACP1: Cytoplasm. ACP2: Lysosome membrane; Single-pass membrane protein. ACP5: Lysosome. ACPP: Isoform 1: Secreted. Isoform 2: Lysosome membrane; Single-pass type I membrane protein.

图片



Western blot - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

All lanes : Anti-Acid phosphatase antibody [EPR21787] (ab235448) at 1/1000 dilution

Lane 1 : Wild-type HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 2 : ACP1 knockout HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 3 : K562 (Human chronic myelogenous leukemia lymphoblast cell line) whole cell lysate
Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

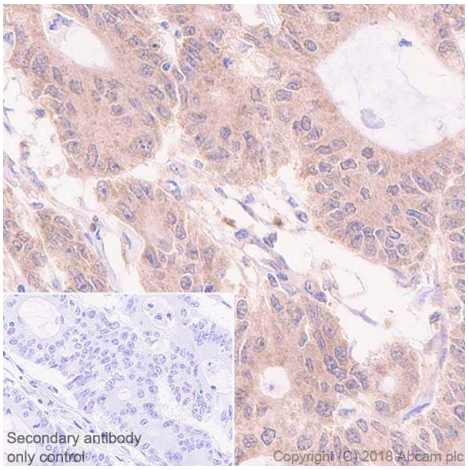
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 18 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab235448 observed at 18 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

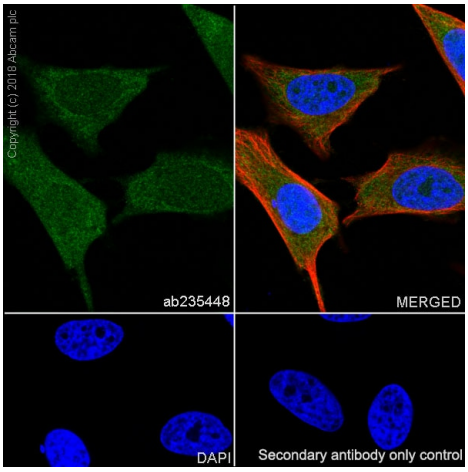
ab235448 was shown to specifically react with ACP1 (Acid phosphatase 1) in wild-type HEK 293 cells as signal was lost in ACP1 knockout cells. Wild-type and ACP1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab235448 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling Acid phosphatase with ab235448 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in human colon cancer (PMID: 25811796) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

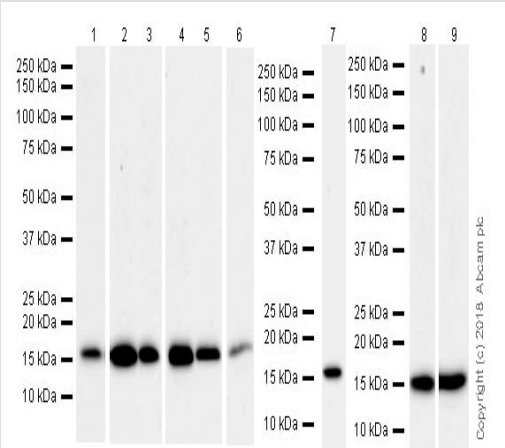
Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunocytochemistry/ Immunofluorescence - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Acid phosphatase with ab235448 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and nuclear staining in HeLa cell line (PMID 26159288). The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Western blot - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

All lanes : Anti-Acid phosphatase antibody [EPR21787] (ab235448) at 1/1000 dilution

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 20 µg
Lane 2 : SH-SY5Y (human neuroblastoma cell line from bone marrow) whole cell lysate at 20 µg
Lane 3 : HCT 116 (human colorectal carcinoma cell line) whole cell lysate at 20 µg
Lane 4 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate at 20 µg
Lane 5 : Human placenta lysate at 20 µg
Lane 6 : Human colon lysate at 20 µg
Lane 7 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 10 µg
Lane 8 : C6 (rat glioma cell line) whole cell lysate at 10 µg
Lane 9 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 10 µg

Secondary
Lanes 1-6 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution
Lanes 7-9 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

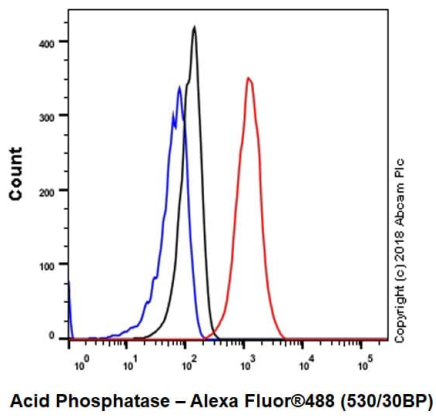
Predicted band size: 18 kDa
Observed band size: 18 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times.

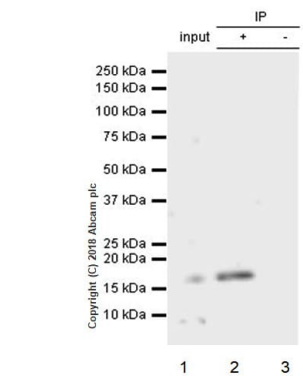
Lane 1: 37 seconds, **Lanes 2-9:** 3 minutes.

The molecular mass observed is consistent with what has been described in the literature (PMID:25811796).



Flow Cytometry (Intracellular) - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Intracellular flow cytometric analysis of4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cell line labeling Acid phosphatase with ab235448 at 1/50 dilution (red) compared with a Isotype control details (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**), at 1/2000 dilution was used as the secondary antibody.

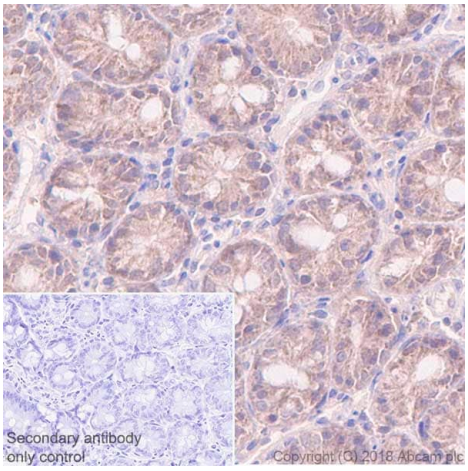


Immunoprecipitation - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Acid phosphatase was immunoprecipitated from 0.35 mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab235448 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab235448 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: HeLa whole cell lysate lysate 10 µg (Input).
Lane 2: ab235448 IP in HeLa whole cell lysate.
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab235448 in HeLa whole cell lysate.

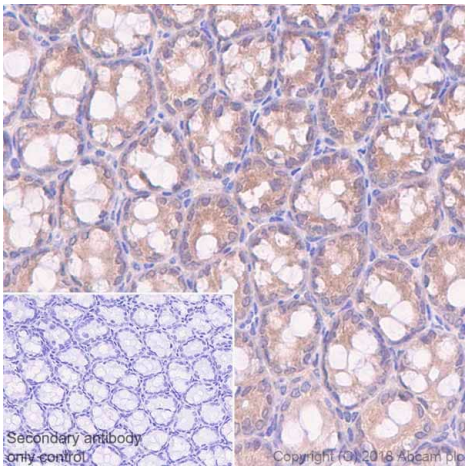
Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 3 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling Acid phosphatase with ab235448 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in rat colon (PMID: 25811796) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

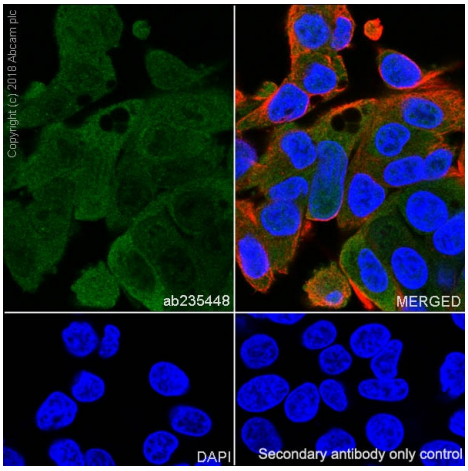
Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling Acid phosphatase with ab235448 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in mouse colon (PMID: 25811796) is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

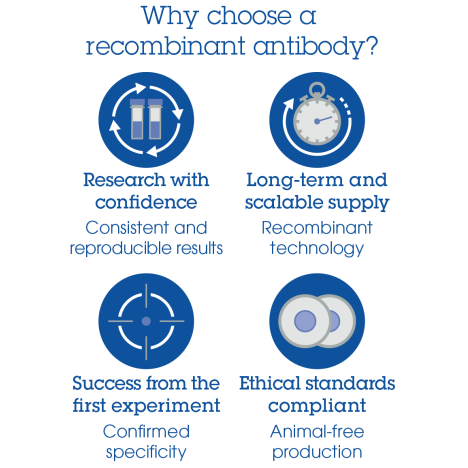
Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).



Immunocytochemistry/ Immunofluorescence - Anti-Acid phosphatase antibody [EPR21787] (ab235448)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Acid phosphatase with ab235448 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and nuclear staining in HepG2 cell line (PMID 26159288). The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Anti-Acid phosphatase antibody [EPR21787] (ab235448)

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