abcam

Product datasheet

Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free ab238888





8 Images

Overview

Product name Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free

Description Rabbit monoclonal [EPR21787] to Acid phosphatase - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Rat colon tissue.

General notes ab238888 is the carrier-free version of ab235448.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR21787

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab238888 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		Use at an assay dependent concentration. Detects a band of approximately 18 kDa (predicted molecular weight: 18 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

Target

Relevance 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

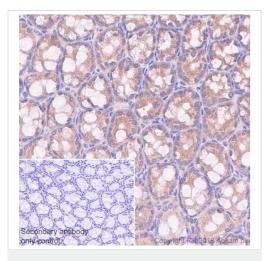
acid phosphatase levels may indicate bone disease.

Cellular localization 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.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

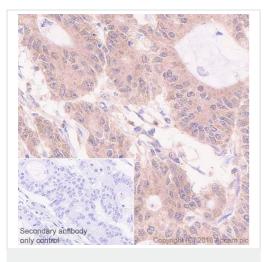
Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling Acid phosphatase with <u>ab235448</u> at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining in mouse colon (PMID: 25811796) is observed.

Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235448).



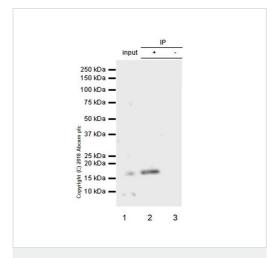
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling Acid phosphatase with <u>ab235448</u> 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.

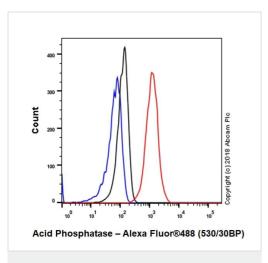
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

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

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Immunoprecipitation - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)



Flow Cytometry (Intracellular) - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

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

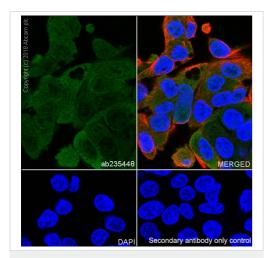
Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab235448</u> in HeLa whole cell lysate.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab235448).

Intracellular flow cytometric analysis of 4% 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab235448</u>).



Immunocytochemistry/ Immunofluorescence - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

ab235448 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

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 lgG 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.

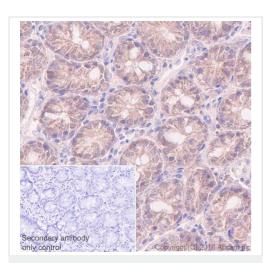
Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (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.

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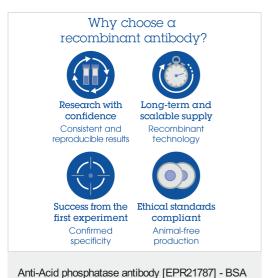
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Acid phosphatase antibody [EPR21787] - BSA and Azide free (ab238888)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling Acid phosphatase with <u>ab235448</u> at 1/1000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) ready to use. Positive staining in rat colon (PMID: 25811796) is observed. Counterstained with hematoxylin.

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and Azide free (ab238888)

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