

Product datasheet

Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] ab191406

Recombinant RabMAb

★★★★☆ 2 Abreviews 18 References 7 Images

Overview

Product name	Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556]
Description	Rabbit monoclonal [EPR15556] to Tartrate Resistant Acid Phosphatase
Host species	Rabbit
Specificity	This antibody gave negative results in IHC-P in both mouse and rat species. Both species were also tested in WB with positive results. Please do not hesitate to contact our Scientific Support if you have any questions.
Tested applications	Suitable for: IP, ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	A431, MDA-MB-435, C6, Raw 264.7, PC-12 and NIH/3T3 cell lysates; Human tonsil and fetal kidney lysates; Human tonsil tissue; MDA-MB-435 cells.
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>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15556
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab191406 in the following tested applications.

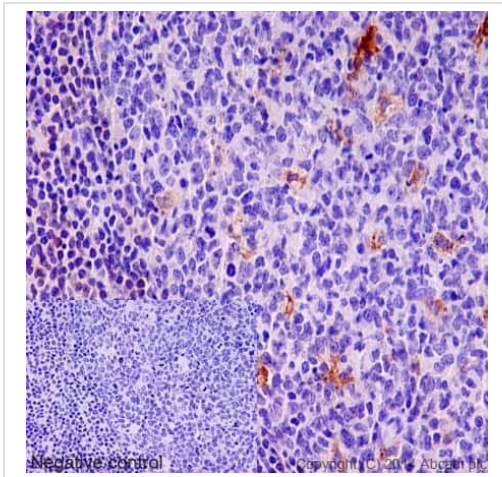
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/50.
ICC/IF		1/100.
WB		1/1000 - 1/10000. Detects a band of approximately 35, 42 kDa (predicted molecular weight: 37 kDa). Per the literature, a novel previously unreported 42 kDa variant of the Tartrate Resistant Acid Phosphatase 5a isoform was identified. So the 42 kDa band should be the Tartrate Resistant Acid Phosphatase 5a isoform.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Involved in osteopontin/bone sialoprotein dephosphorylation. Its expression seems to increase in certain pathological states such as Gaucher and Hodgkin diseases, the hairy cell, the B-cell, and the T-cell leukemias.
Sequence similarities	Belongs to the metallophosphoesterase superfamily. Purple acid phosphatase family.
Cellular localization	Lysosome.

Images

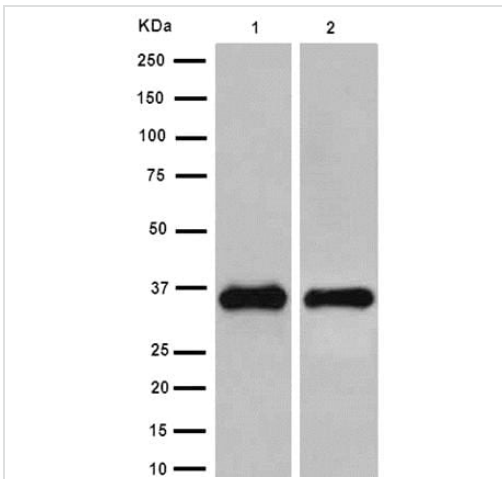


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling Tartrate Resistant Acid Phosphatase with ab191406 at 1/100 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Counter stained with Hematoxylin.

In the negative control PBS was used instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

All lanes : Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406) at 1/10000 dilution

Lane 1 : A431 cell lysate

Lane 2 : MDA-MB-435 cell lysate

Lysates/proteins at 20 µg per lane.

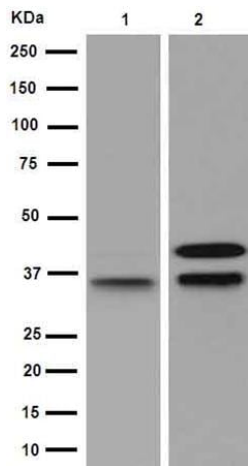
Secondary

All lanes : Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Predicted band size: 37 kDa

Observed band size: 35 kDa

Blocking/Dilution buffer: 5% NFDM /TBST.



Western blot - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

All lanes : Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406) at 1/1000 dilution

Lane 1 : Human tonsil lysate

Lane 2 : Human fetal kidney lysate

Lysates/proteins at 20 µg per lane.

Secondary

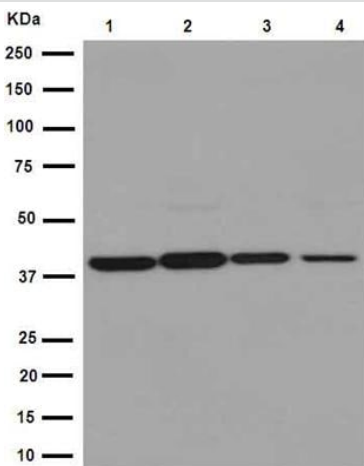
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 37 kDa

Observed band size: 35,42 kDa

Blocking/Dilution buffer: 5% NFDN /TBST.

Per the literature, a novel previously unreported 42 kDa variant of the TRAP 5a isoform was identified. So the 42 kDa band should be the TRAP 5a isoform.



Western blot - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

All lanes : Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406) at 1/1000 dilution

Lane 1 : C6 (Rat glial tumor cell line) cell lysate

Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) cell lysate

Lane 4 : NIH/3T3 (Mouse embryo fibroblast cell line) cell lysate

Lysates/proteins at 10 µg per lane.

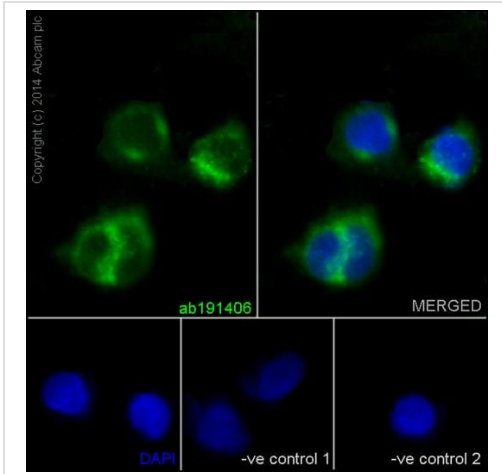
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 37 kDa

Observed band size: 42 kDa

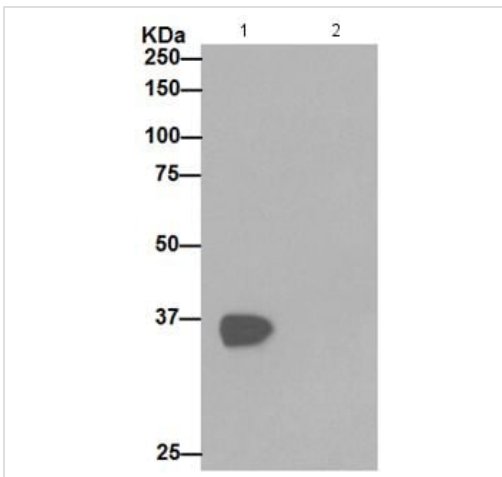
Blocking/Dilution buffer: 5% NFDM /TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% triton X-100 permeabilized MDA-MB-435 cells labeling Tartrate Resistant Acid Phosphatase with ab191406 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor®488) secondary antibody (ab150077) at 1/200 dilution. Nuclear counter stain DAPI (blue).

The two negative controls used anti-TRAP 5 primary antibody at 1/100 dilution, followed by Goat anti-mouse IgG (Alexa Fluor®594) secondary antibody at 1/400 dilution.



Immunoprecipitation - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

Western blot analysis of TRAP 5 in MDA-MB-435 cell lysate immunoprecipitated using ab191406 at 1/50 dilution (Lane 1). Lane 2: PBS instead of MDA-MB-435 lysates.

Secondary antibody: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution.

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-Tartrate Resistant Acid Phosphatase antibody
[EPR15556] (ab191406)

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