

Product datasheet

Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] ab191406

Recombinant RabMAb

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	 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA

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Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15556
lsotype	lgG

Applications

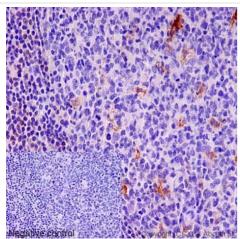
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab191406 in the following tested applications.

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.

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.
Belongs to the metallophosphoesterase superfamily. Purple acid phosphatase family.
Lysosome.

Images



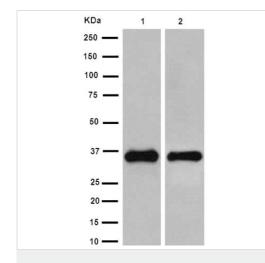
Negative endrol

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.

Immunohistochemical analysis of paraffin-embedded Human tonsil

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



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

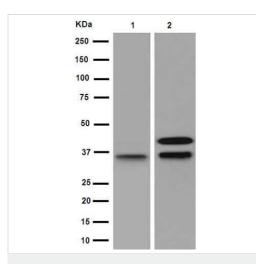
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-rabbit lgG, (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% NFDM /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.

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

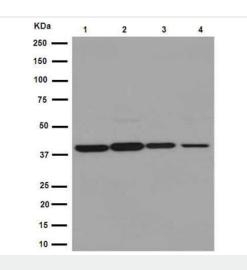
 $\label{eq:lambda} \textbf{Lane 4}: \textsc{NIH}/3\textsc{T3} (Mouse embryo fibroblast cell line) cell lysate$

Lysates/proteins at 10 µg per lane.

Secondary

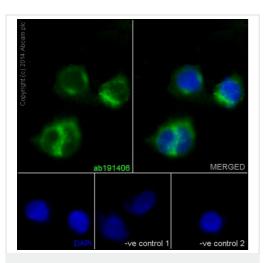
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 37 kDa Observed band size: 42 kDa



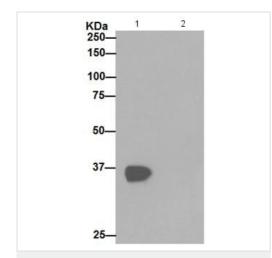
Western blot - Anti-Tartrate Resistant Acid Phosphatase antibody [EPR15556] (ab191406)

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 nonreduced form of IgG at 1/1000 dilution.

Why choose α recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free specificity production

Anti-Tartrate Resistant Acid Phosphatase antibody

[EPR15556] (ab191406)

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

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