abcam

Product datasheet

Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free ab178352

Recombinant RabMAb

8 Images

Overview

Product name	Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free
Description	Rabbit monoclonal [EPR11588(B)] to Aquaporin 1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IHC-P, WB, Flow Cyt (Intra) **Unsuitable for:** IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: 293T cells; IHC-P: Human, mouse and rat kidney tissue; Flow Cyt (Intra): 293T cells. WB: Mouse and rat kidney lysates - boiled and unboiled. Human heart and spleen lysate.
General notes	ab178352 is the carrier-free version of **ab168387**. 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 cell-based 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. 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	Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR11588(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab178352 in the following tested applications.

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

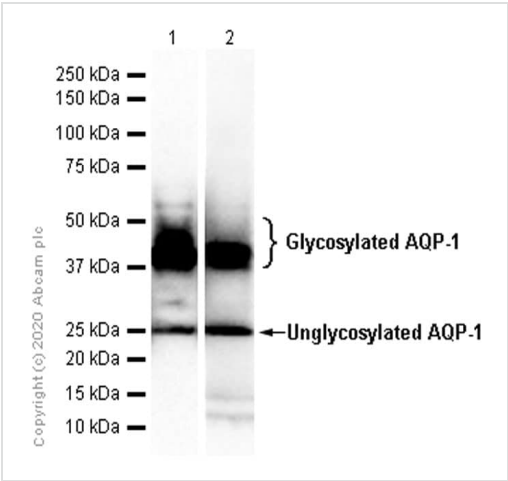
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
WB		Use at an assay dependent concentration. Predicted molecular weight: 28 kDa.
Flow Cyt (Intra)		1/2000.

Application notes Is unsuitable for IP.

Target

Function	Forms a water-specific channel that provides the plasma membranes of red cells and kidney proximal tubules with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.
Tissue specificity	Expressed in a number of tissues including erythrocytes, renal tubules, retinal pigment epithelium, heart, lung, skeletal muscle, kidney and pancreas. Weakly expressed in brain, placenta and liver.
Sequence similarities	Belongs to the MIP/aquaporin (TC 1.A.8) family.
Domain	Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).
Cellular localization	Membrane.

Images



Western blot - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

All lanes : Anti-Aquaporin 1 antibody [EPR11588(B)] (**ab168387**) at 1/10000 dilution (Purified)

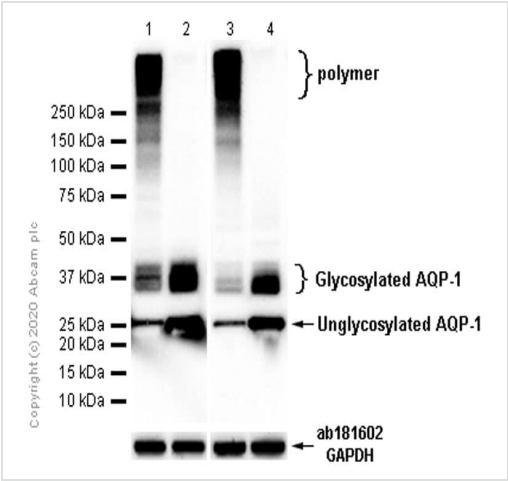
Lane 1 : Human heart lysate unboiled
Lane 2 : Human spleen lysate unboiled

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 28 kDa

Unglycosylated AQP-1: 28kDa; Glycosylated AQP-1: 35-50kDa.

This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.



Western blot - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

All lanes : Anti-Aquaporin 1 antibody [EPR11588(B)] (**ab168387**) at 1/10000 dilution (Purified)

Lane 1 : Mouse kidney lysate boiled
Lane 2 : Mouse kidney lysate unboiled
Lane 3 : Rat kidney lysate boiled
Lane 4 : Rat kidney lysate unboiled

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 28 kDa

Unglycosylated AQP-1: 28kDa; Glycosylated AQP-1: 35-50kDa.

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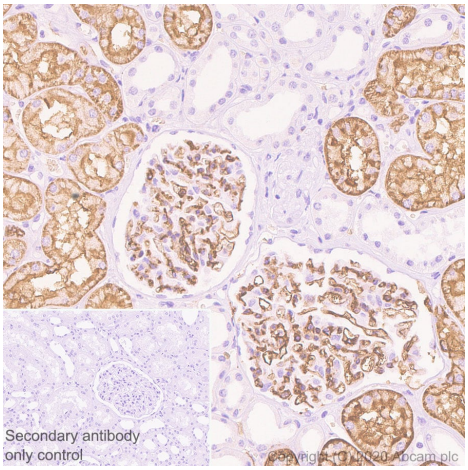
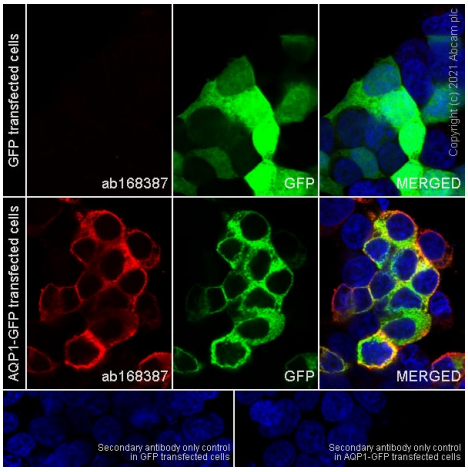


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

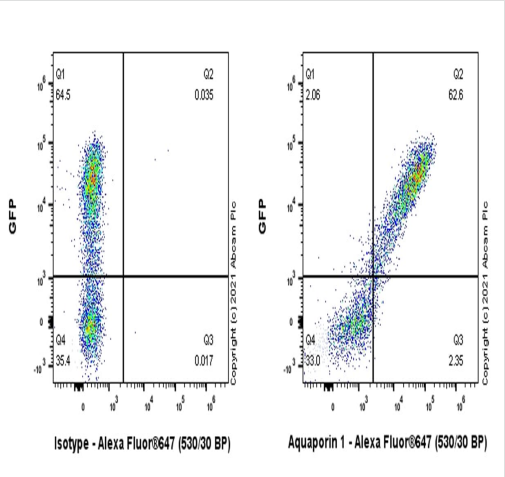
This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling Aquaporin 1 with purified **ab168387** at 1/8000 dilution (0.02 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



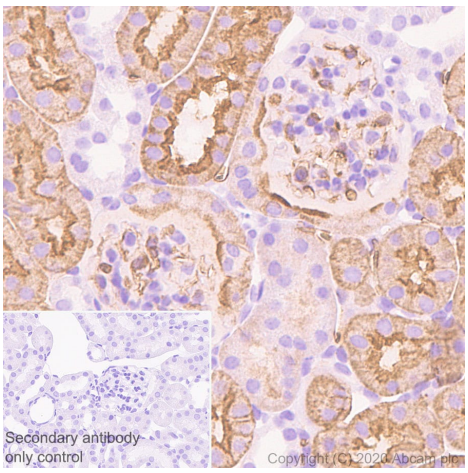
Immunocytochemistry/ Immunofluorescence - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.
Immunocytochemistry analysis of 293T (Human embryonic kidney epithelial cell) transfected with EGFP tagged AQP1 construct cells labeling Aquaporin 1 with purified **ab168387** at 1/50 dilution (3.9 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with N/A. 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. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

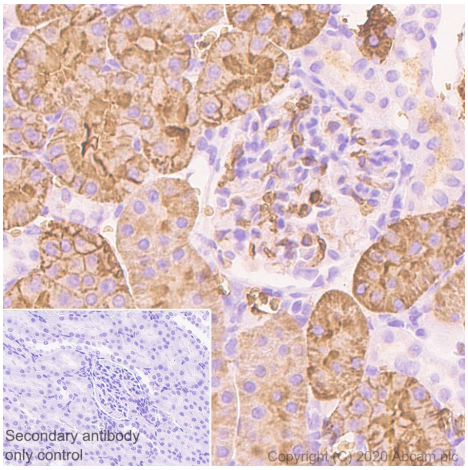
This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.
Flow Cytometry (Intracellular) analysis of 293T (Human embryonic kidney epithelial cell) transfected with EGFP tagged AQP1 construct cells labelling Aquaporin 1 with purified **ab168387** at 1/2000 dilution (0.1 µg/mL, Right) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 647, **ab150079**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Left). Unlabelled control - /.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling Aquaporin 1 with purified **ab168387** at 1/8000 dilution (0.02 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [EPR11588(B)] - BSA and Azide free (ab178352)

This data was developed using **ab168387**, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling Aquaporin 1 with purified **ab168387** at 1/8000 dilution (0.02 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.
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