

Product datasheet

Anti-Aquaporin 1 antibody [EPR11588(B)] ab168387

Recombinant RabMAb

★★★★★ [4 Abreviews](#) [31 References](#) [8 Images](#)

Overview

Product name	Anti-Aquaporin 1 antibody [EPR11588(B)]
Description	Rabbit monoclonal [EPR11588(B)] to Aquaporin 1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt (Intra), ICC/IF 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	IHC-P: Human, mouse and rat kidney tissue; ICC/IF: 293T cells; Flow Cyt (Intra): 293T cells. WB: Mouse and rat kidney lysates - boiled and unboiled. Human heart and spleen lysate.
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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR11588(B)

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab168387 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	★★★★★ (1)	1/10000. Predicted molecular weight: 28 kDa. For unpurified use at 1/1000 - 1/10000.
IHC-P		1/8000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. For unpurified use at 1/250 - 1/500. See IHC antigen retrieval protocols .
Flow Cyt (Intra)		1/2000.
ICC/IF	★★★★☆ (1)	1/50.

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.

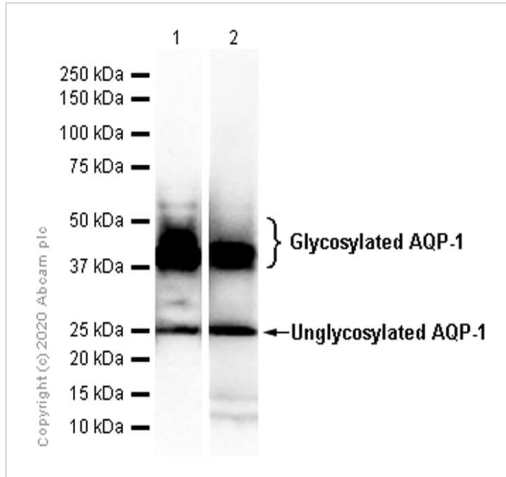
Domain

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)] (ab168387)

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

Lane 1 : Human heart lysate unboiled

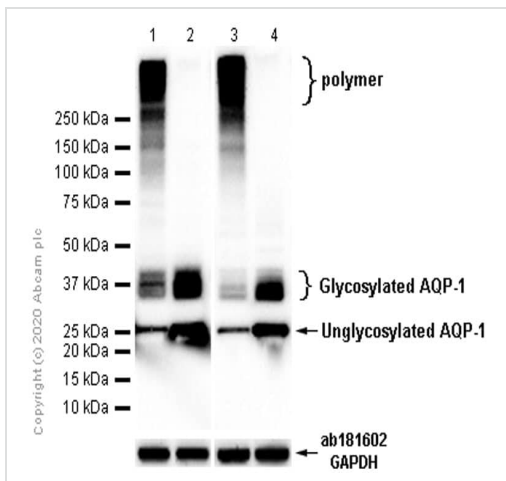
Lane 2 : Human spleen lysate unboiled

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



Western blot - Anti-Aquaporin 1 antibody
[EPR11588(B)] (ab168387)

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

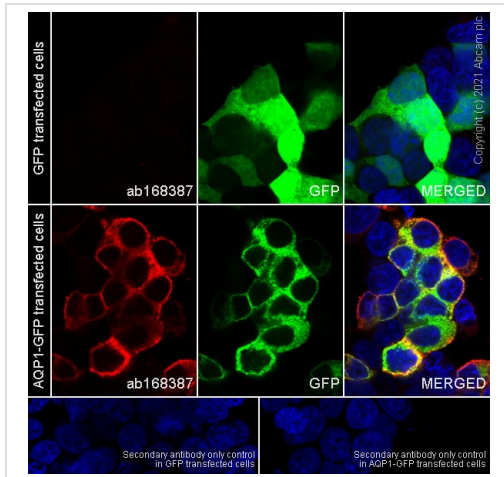
Lane 4 : Rat kidney lysate unboiled

Secondary

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

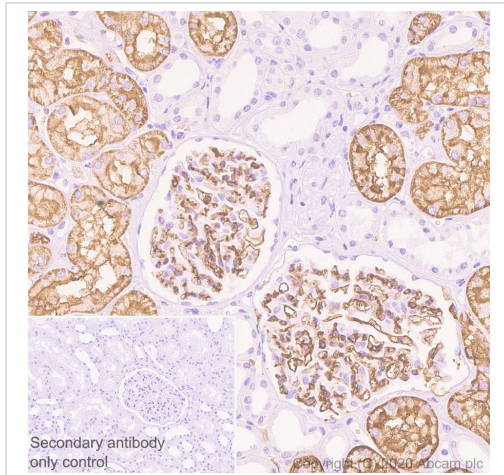
Predicted band size: 28 kDa

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



Immunocytochemistry/ Immunofluorescence - Anti-Aquaporin 1 antibody [EPR11588(B)] (ab168387)

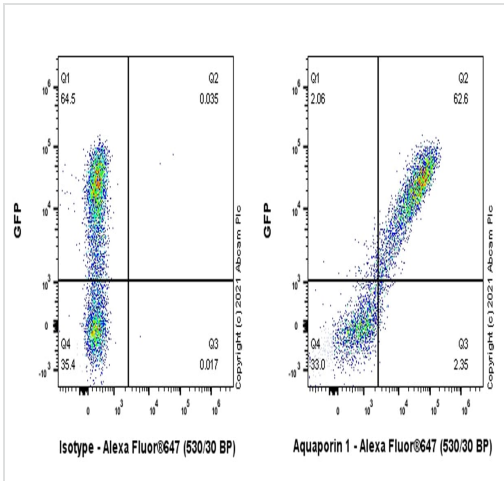
Immunocytochemistry analysis of 293T (Human embryonic kidney epithelial cell) transfected with EGFP tagged AQP1 construct cells labeling Aquaporin 1 with purified ab168387 at 1/50 dilution (3.9 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [EPR11588(B)] (ab168387)

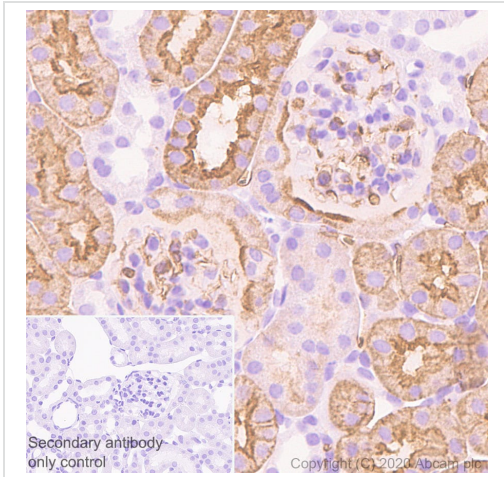
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling Aquaporin 1 with purified ab168387 at 1/8000 dilution (0.02 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval 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.



Flow Cytometry (Intracellular) - Anti-Aquaporin 1 antibody [EPR11588(B)] (ab168387)

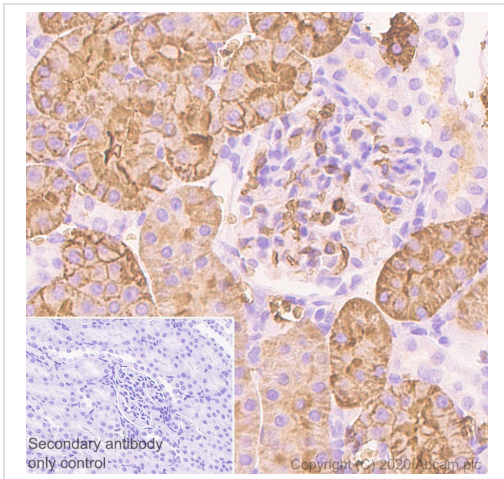
Flow Cytometry (Intracellular) analysis of 293T (Human embryonic kidney epithelial cell) transfected with EGFP tagged AQP1 construct cells labelling Aquaporin 1 with purified ab168387 at 1/2000 dilution (0.1 µg/mL, Right) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. 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)] (ab168387)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labelling 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) 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.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [EPR11588(B)] (ab168387)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Aquaporin 1 antibody [EPR11588(B)] (ab168387)

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