




Product datasheet

Anti-Aquaporin 1 antibody [1/22] ab9566

★★★★★ [18 Abreviews](#) [63 References](#) [4 Images](#)

Overview

Product name	Anti-Aquaporin 1 antibody [1/22]
Description	Mouse monoclonal [1/22] to Aquaporin 1
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, Flow Cyt
Species reactivity	Reacts with: Rat, Human Predicted to work with: Sheep, Cow 
Immunogen	Synthetic peptide: GQVEEYDLDDDINSRVEMKPK , corresponding to amino acids 249-269 of Aquaporin 1.  Run BLAST with  Run BLAST with
Epitope	Intracellular C-terminal AQP 1 epitope (active channel loop)
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1/22
Isotype	IgG2b

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9566 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)	Use at an assay dependent concentration. Detects a band of approximately 29 kDa (predicted molecular weight: 29 kDa).
IHC-P	★★★★★ (11)	Use at an assay dependent concentration.
Flow Cyt		Use 1-2µg for 10 ⁶ cells. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

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.

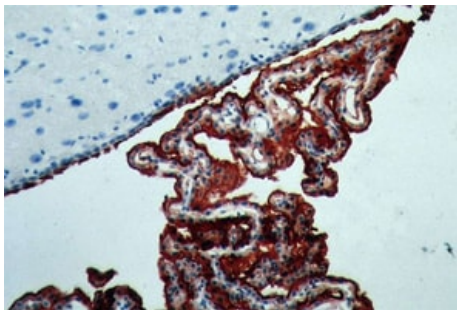
Domain

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

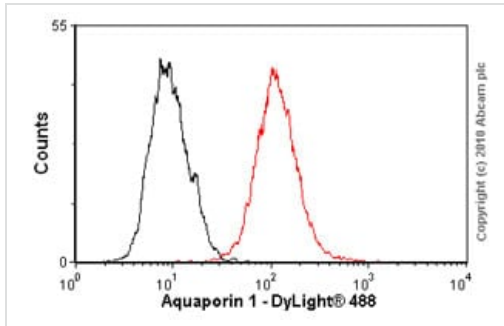
Membrane.

Images



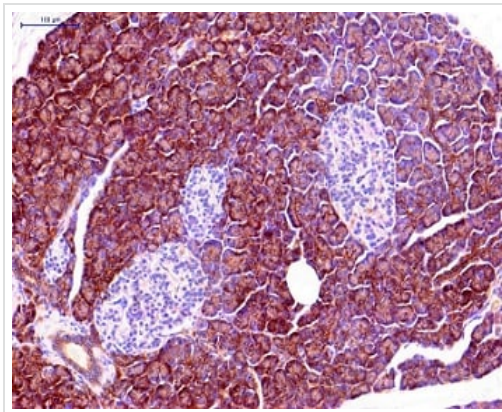
Immunohistochemical staining of aquaporin 1 in rat brain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody
[1/22] (ab9566)



Flow Cytometry - Anti-Aquaporin 1 antibody [1/22]
(ab9566)

Overlay histogram showing HEK293 cells stained with ab9566 (red line). The cells were fixed with methanol (5 min) and then permeabilized with 0.1% PBS-Triton for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9566, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] ([ab91366](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Triton used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody [1/22] (ab9566)

Immunohistochemical analysis of exocrine pancreas cells labeling Aquaporin 1 with ab9566.



Western blot - Anti-Aquaporin 1 antibody [1/22]
(ab9566)

Anti-Aquaporin 1 antibody [1/22] (ab9566) at 1 µg/ml + Human skeletal muscle tissue lysate - total protein ([ab29330](#)) at 10 µg

Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 29 kDa

Observed band size: 29 kDa

Additional bands at: 50 kDa, 75 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 30 seconds

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors