

Basic Information

Product Name	Anti-AQP1 Antibody	
Gene Name	AQP1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Aquaporin 1, different from the related mouse and rat sequences by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	25, 35-38 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

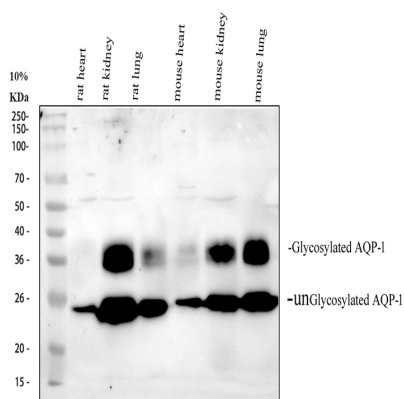
Background Information

Aquaporin 1 is a 28-kD integral protein thought at first to be a breakdown product of the Rh polypeptide but was later shown to be a unique molecule that is abundant in erythrocytes and renal tubules. AQP1 is also expressed by the choroid plexus and various other tissues. It 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.

Reference

Anti-AQP1 Antibody被引用在7文献中。

Selected Validation Data



Western blot analysis of AQP1 using anti-AQP1 antibody (PB9473).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat heart tissue lysates,

Lane 2: rat kidney tissue lysates,

Lane 3: rat lung tissue lysates,

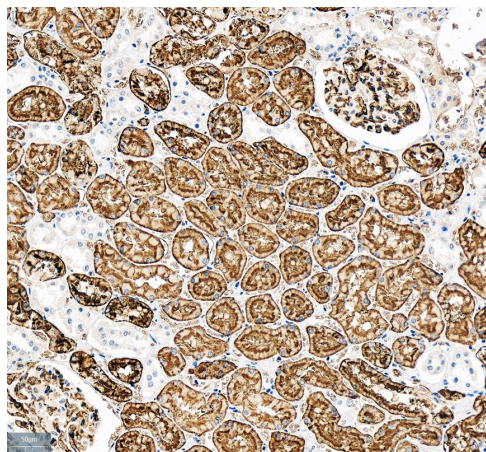
Lane 4: mouse heart tissue lysates,

Lane 5: mouse kidney tissue lysates,

Lane 6: mouse lung tissue lysates.

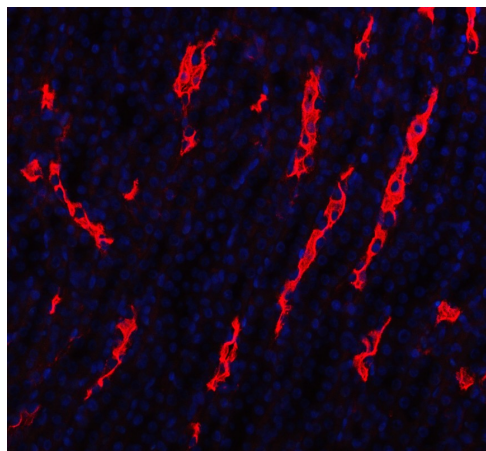
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-AQP1 antigen affinity purified polyclonal antibody (PB9473) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for AQP1 at approximately 25, 35-38 kDa. The expected band size for AQP1 is at 29 kDa.

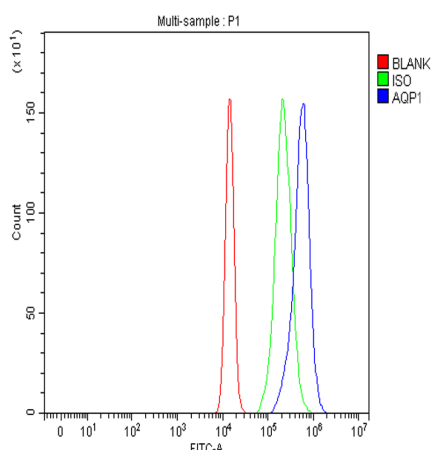


IHC analysis of AQP1 using anti-AQP1 antibody (PB9473).

AQP1 was detected in a paraffin-embedded section of human kidney tissue. The tissue section was incubated with rabbit anti-AQP1 Antibody (PB9473) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of AQP1 using anti-AQP1 antibody (PB9473). AQP1 was detected in a paraffin-embedded section of rat kidney tissue. The tissue section was incubated with rabbit anti-AQP1 Antibody (PB9473) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U2OS cells using anti-AQP1 antibody (PB9473).

Overlay histogram showing U2OS cells stained with PB9473 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-AQP1 Antibody (PB9473) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.