

AQP1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50868**Specification**

AQP1 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P29972
Reactivity	Human, Mouse, Rat, Sheep, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28; [uniprot]28,20,23,17; KDa
Antigen Region	181-269/269

AQP1 Antibody - Additional Information**Gene ID** 358**Other Names**

Aquaporin-1, AQP-1, Aquaporin-CHIP, Urine water channel, Water channel protein for red blood cells and kidney proximal tubule, AQP1, CHIP28

Dilution

WB~1:100~1:500<br \>IHC-P~1:100~1:500

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

AQP1 Antibody - Protein Information**Name** AQP1 ([HGNC:633](#))**Synonyms** CHIP28**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 (PubMed:1373524). Component of the ankyrin-1 complex, a multiprotein complex involved in the stability and shape of the erythrocyte membrane (PubMed:35835865).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

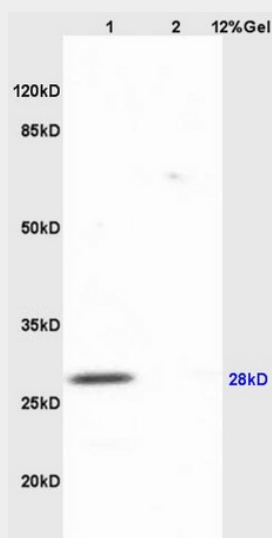
Detected in erythrocytes (at protein level). Expressed in a number of tissues including erythrocytes, renal tubules, retinal pigment epithelium, heart, lung, skeletal muscle, kidney and pancreas. Weakly expressed in brain, placenta and liver

AQP1 Antibody - Protocols

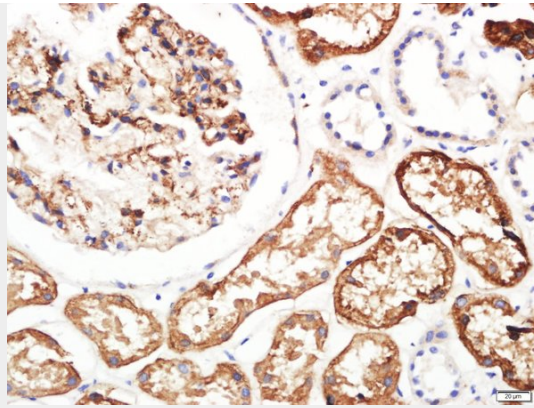
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

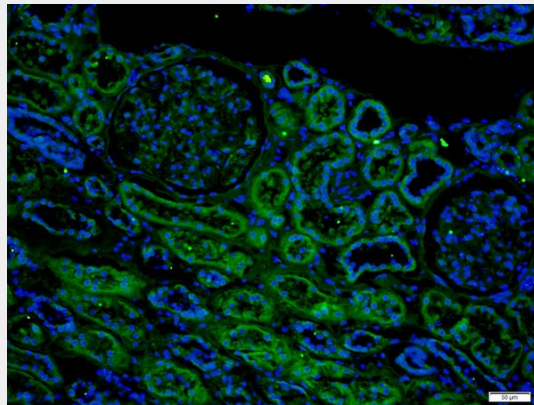
AQP1 Antibody - Images



Lane 1: mouse heart lysates Lane 2: mouse lung lysates probed with Anti AQP1/CHIP Polyclonal Antibody, Unconjugated AP50868 at 1:200 in 4°C. Followed by conjugation to secondary antibody at 1:3000 90min in 37°C. Predicted band 28kD. Observed band size: 28kD.



Paraformaldehyde-fixed, paraffin embedded human kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with AQP1 Polyclonal Antibody, Unconjugated (AP50868) at 1:200 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded human kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with AQP1 Polyclonal Antibody, Unconjugated AP50868 at 1:200 overnight at 4°C, followed by a conjugated secondary antibody at [1:500] for 90 minutes and DAPI staining of the nuclei.

AQP1 Antibody - Background

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.

AQP1 Antibody - References

Preston G.M.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:11110-11114(1991).
Moon C.,et al.J. Biol. Chem. 268:15772-15778(1993).
Ruiz A.C.,et al.Biochim. Biophys. Acta 1282:174-178(1996).
Li X.,et al.Biochem. Mol. Biol. Int. 32:371-377(1994).
Ota T.,et al.Nat. Genet. 36:40-45(2004).