

AQP1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17893b**Specification**

AQP1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P29972
Other Accession	P29975 , Q02013 , P47865 , NP_932766.1 , P56401
Reactivity	Human, Mouse
Predicted	Bovine, Rat, Sheep
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	28526
Antigen Region	241-269

AQP1 Antibody (C-term) - 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

Target/Specificity

This AQP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241-269 amino acids from the C-terminal region of human AQP1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AQP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

AQP1 Antibody (C-term) - 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

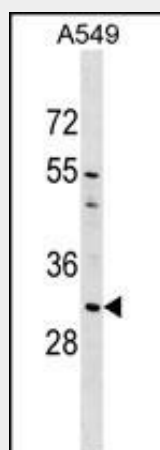
Tissue Location

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

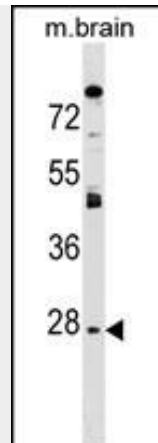
AQP1 Antibody (C-term) - Protocols

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 (C-term) - Images

AQP1 Antibody (C-term) (Cat. #AP17893b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the AQP1 antibody detected the AQP1 protein (arrow).



AQP1 Antibody (C-term) (Cat. #AP17893b) western blot analysis in mouse brain tissue lysates (35ug/lane). This demonstrates the AQP1 antibody detected the AQP1 protein (arrow).

AQP1 Antibody (C-term) - Background

Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). This gene encodes an aquaporin which functions as a molecular water channel protein. It is a homotetramer with 6 bilayer spanning domains and N-glycosylation sites. The protein physically resembles channel proteins and is abundant in erythrocytes and renal tubes. The gene encoding this aquaporin is a possible candidate for disorders involving imbalance in ocular fluid movement. Several transcript variants encoding different isoforms have been found for this gene.

AQP1 Antibody (C-term) - References

Chen, L.M., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 299 (5), R1163-R1174 (2010) :
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Shankardas, J., et al. Mol. Vis. 16, 1538-1548 (2010) :
Halverson, G.R., et al. Immunohematology 26(1):22-26(2010)
Sui, H., et al. Nature 414(6866):872-878(2001)