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AQP1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17893b

Specification

AQP1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P29972

AQP1 Antibody (C-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AQP1 Antibody (C-term) Blocking Peptide - 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

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AQP1 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

AQP1 Antibody (C-term) Blocking Peptide - Images

AQP1 Antibody (C-term) Blocking Peptide - Background

Aquaporins are a family of small integral membraneproteins related to the major intrinsic protein (MIP or AQP0). Thisgene encodes an aquaporin which functions as a molecular waterchannel protein. It is a homotetramer with 6 bilayer spanningdomains and N-glycosylation sites. The protein physically resembleschannel proteins and is abundant in erythrocytes and renal tubes.The gene encoding this aquaporin is a possible candidate fordisorders involving imbalance in ocular fluid movement. Severaltranscript variants encoding different isoforms have been found forthis gene.

AQP1 Antibody (C-term) Blocking Peptide - 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)