10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AQP2 / Aquaporin 2 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS11950

Specification

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Product Information

Application	**IHC**
Primary Accession	P41181
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**29kDa KDa**

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Additional Information

Gene ID 359

Other Names
Aquaporin-2, AQP-2, ADH water channel, Aquaporin-CD, AQP-CD, Collecting duct water channel protein, WCH-CD, Water channel protein for renal collecting duct, AQP2

Target/Specificity
synthetic peptide corresponding to N-terminal residues of human AQP2(aquaporin 2)

Reconstitution & Storage
+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions
AQP2 / Aquaporin 2 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Protein Information

Name AQP2 (HGNC:634)

Function
Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient (PubMed:15509592, PubMed:7510718, PubMed:7524315, PubMed:8140421, PubMed:8584435). Plays an essential role in renal water homeostasis (PubMed:15509592, PubMed:7524315, PubMed:8140421). Could also be permeable to glycerol (PubMed:<a href="http://www.uniprot.org/citations/8584435"

target="_blank">8584435).

Cellular Location
Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P34080}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Note=Shuttles from vesicles to the apical membrane (PubMed:15509592). Vasopressin-regulated phosphorylation is required for translocation to the apical cell membrane (PubMed:15509592). PLEKHA8/FAPP2 is required to transport AQP2 from the TGN to sites where AQP2 is phosphorylated (By similarity) {ECO:0000250|UniProtKB:P34080, ECO:0000269|PubMed:15509592}

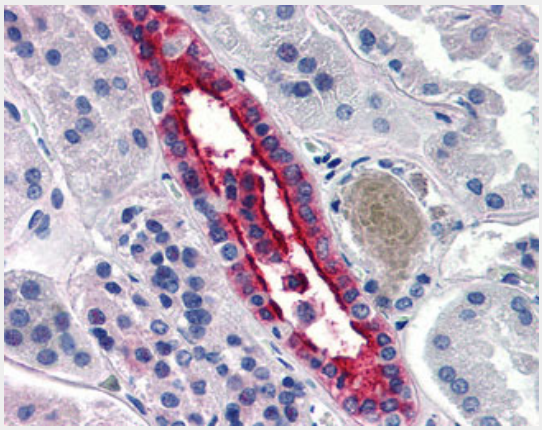
Tissue Location
Expressed in collecting tubules in kidney medulla (at protein level) (PubMed:7510718). Detected in kidney (PubMed:7510718).

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Images



Anti-AQP2 antibody IHC of human kidney.

AQP2 / Aquaporin 2 Antibody (N-Terminus) - Background

Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.

AQP2 / Aquaporin 2 Antibody (N-Terminus) - References

Deen P.M.T.,et al.Science 264:92-94(1994).
Uchida S.,et al.J. Biol. Chem. 269:23451-23455(1994).
van Lieburg A.F.,et al.Am. J. Hum. Genet. 55:648-652(1994).
Sasaki S.,et al.J. Clin. Invest. 93:1250-1256(1994).
Marr N.,et al.Hum. Mol. Genet. 11:779-789(2002).