

AQP2 Polyclonal Antibody
Catalog # AP68473**Specification****AQP2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P41181
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal

AQP2 Polyclonal Antibody - Additional Information**Gene ID** 359**Other Names**

AQP2; 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

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

AQP2 Polyclonal Antibody - 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:<[a href="http://www.uniprot.org/citations/15509592" target="_blank">http://www.uniprot.org/citations/15509592](http://www.uniprot.org/citations/15509592)>15509592, PubMed:<[a href="http://www.uniprot.org/citations/7510718" target="_blank">http://www.uniprot.org/citations/7510718](http://www.uniprot.org/citations/7510718)>7510718, PubMed:<[a href="http://www.uniprot.org/citations/7524315" target="_blank">http://www.uniprot.org/citations/7524315](http://www.uniprot.org/citations/7524315)>7524315, PubMed:<[a href="http://www.uniprot.org/citations/8140421" target="_blank">http://www.uniprot.org/citations/8140421](http://www.uniprot.org/citations/8140421)>8140421, PubMed:<[a href="http://www.uniprot.org/citations/8584435" target="_blank">http://www.uniprot.org/citations/8584435](http://www.uniprot.org/citations/8584435)>8584435). Plays an essential role in renal water homeostasis (PubMed:<[a href="http://www.uniprot.org/citations/15509592" target="_blank">http://www.uniprot.org/citations/15509592](http://www.uniprot.org/citations/15509592)>15509592, PubMed:<[a href="http://www.uniprot.org/citations/7524315" target="_blank">http://www.uniprot.org/citations/7524315](http://www.uniprot.org/citations/7524315)>7524315, PubMed:<[a href="http://www.uniprot.org/citations/8140421" target="_blank">http://www.uniprot.org/citations/8140421](http://www.uniprot.org/citations/8140421)>8140421). Could also be permeable to glycerol (PubMed:<[a href="http://www.uniprot.org/citations/8584435" target="_blank">http://www.uniprot.org/citations/8584435](http://www.uniprot.org/citations/8584435)>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}

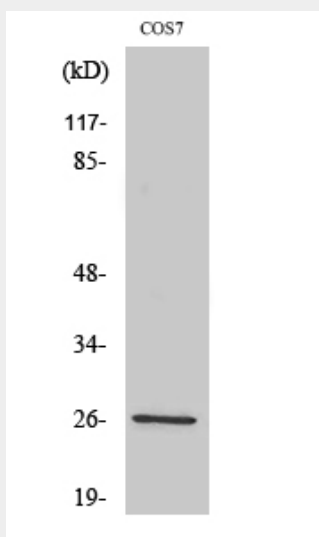
Tissue Location

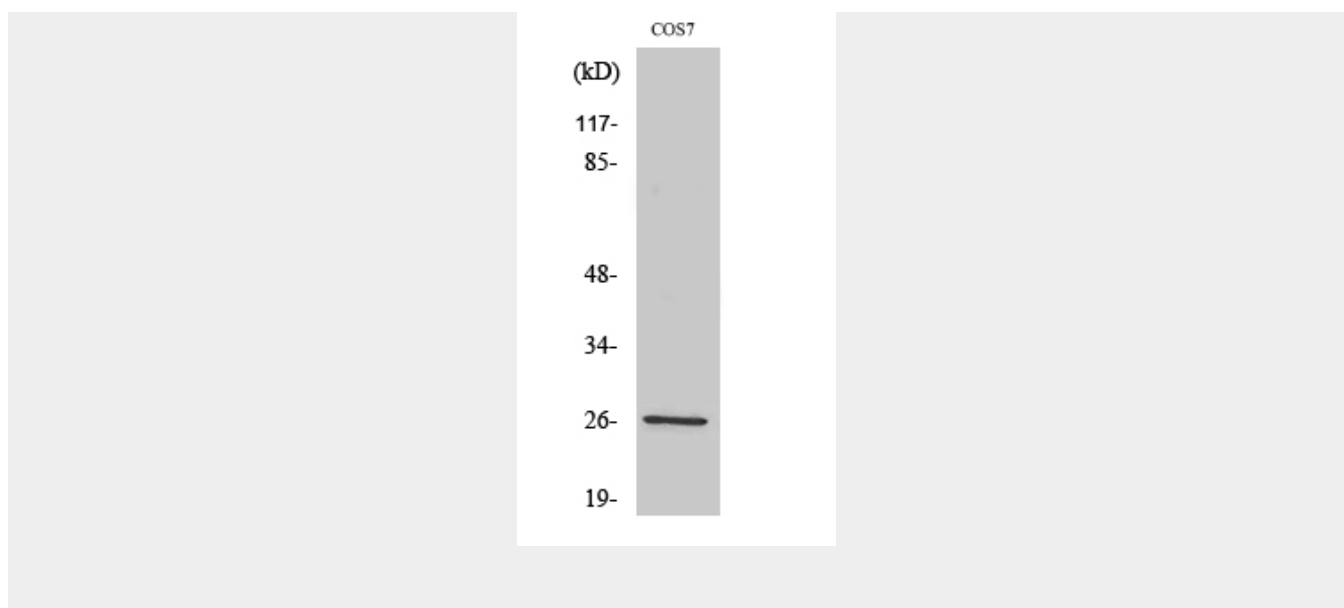
Expressed in collecting tubules in kidney medulla (at protein level) (PubMed:7510718). Detected in kidney (PubMed:7510718).

AQP2 Polyclonal 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](#)

AQP2 Polyclonal Antibody - Images



AQP2 Polyclonal Antibody - 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.