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Aqp2 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12402

Specification

Aqp2 antibody - middle region - Product Information

Application	**WB**
Primary Accession	P56402
Other Accession	NM_009699, NP_033829
Reactivity	**Human, Mouse, Rat, Sheep, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Pig, Sheep, Horse, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**29kDa KDa**

Aqp2 antibody - middle region - Additional Information

Gene ID 11827

Alias Symbol	**AQP-CD, WCH-CD, cph, jpk**

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

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-Aqp2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
Aqp2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Aqp2 antibody - middle region - Protein Information

Name Aqp2 {ECO:0000312|MGI:MGI:1096865}

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:10191086). Plays an essential role in renal water homeostasis (PubMed:16641094). Could also be permeable to glycerol (By similarity).

Cellular Location
Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P41181}. Basolateral cell membrane {ECO:0000250|UniProtKB:P34080}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P41181}. Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P41181}. Cytoplasmic vesicle membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P41181}. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:P41181}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P41181}. Note=Shuttles from vesicles to the apical membrane. Vasopressin-regulated phosphorylation is required for translocation to the apical cell membrane (PubMed:16735444) PLEKHA8/FAPP2 is required to transport AQP2 from the TGN to sites where AQP2 is phosphorylated. {ECO:0000250|UniProtKB:P41181, ECO:0000269|PubMed:16735444}

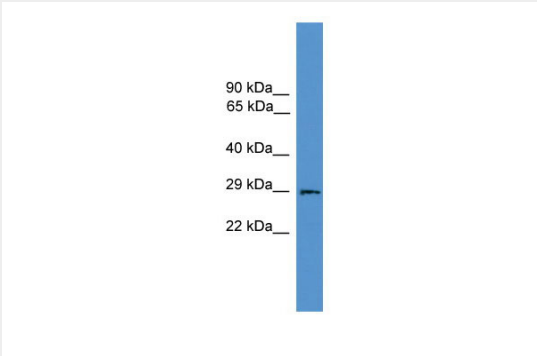
Tissue Location
Detected in principal cells in the collecting duct in kidney medulla and cortex (at protein level) (PubMed:10191086, PubMed:16641094, PubMed:16735444, PubMed:31605441). Expressed in a radial pattern from the cortex through the outer medulla into the inner medulla (PubMed:12426236). Higher levels in the inner medulla (PubMed:12426236).

Aqp2 antibody - middle region - 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 antibody - middle region - Images



WB Suggested Anti-Aqp2 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: Mouse Heart