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Aqp2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12402

Product Information

Application	WB
Primary Accession	P56402
Other Accession	NM_009699, NP_033829
Reactivity	Human, Mouse, Rat, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Pig, Dog, Horse, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28965

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.

Protein Information

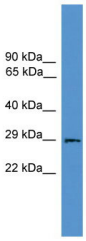
Name	Aqp2 {ECO:0000312|MGI:MGI:1096865}
Function	Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient (PubMed:10191086). Plays an essential role in renal water 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).

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.