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Anti-Aquaporin 2 (pS256) Antibody

Rabbit polyclonal antibody to Aquaporin 2 (pS256)
Catalog # AP61447

Product Information

Application	WB, IHC
Primary Accession	P41181
Other Accession	P56402
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog, SARS
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28837

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Aquaporin 2 with a site at pS256. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

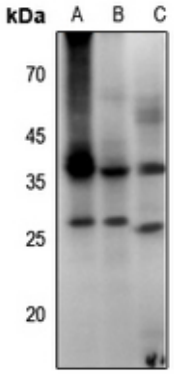
Name	AQP2 (HGNC:634)
Function	Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient (PubMed:15509592, PubMed:7510718, PubMed:7524315, PubMed:8140421, PubMed:8584435). Plays an essential role in renal water homeostasis (PubMed:15509592, PubMed:7524315, PubMed:8140421). Could also be permeable to glycerol (PubMed: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).

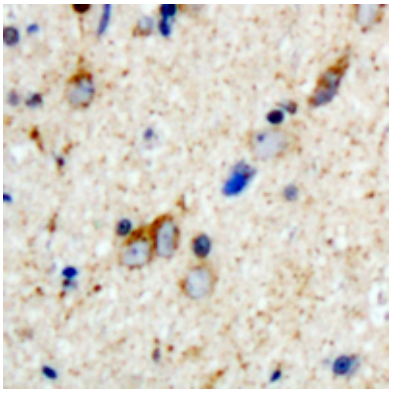
Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Aquaporin 2 with a site at pS256. The exact sequence is proprietary.

Images



Western blot analysis of Aquaporin 2 (pS256) expression in mouse kidney (A), rat kidney (B), mouse lung (C) whole cell lysates.



Immunohistochemical analysis of Aquaporin 2 (pS256) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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