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Anti-Aquaporin 2 (Ser261) Antibody

Our Anti-Aquaporin 2 (Ser261) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutio
Catalog # AN1312

Product Information

Application	WB, IHC, ICC, IP
Primary Accession	P34080
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28931

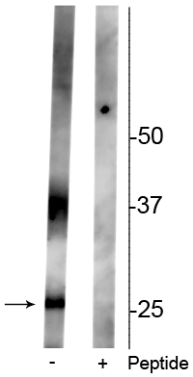
Additional Information

Gene ID	25386
Other Names	ADH water channel antibody, AQP 2 antibody, AQP CD antibody, AQP-2 antibody, AQP-CD antibody, AQP2 antibody, AQP2_HUMAN antibody, AQPCD antibody, Aquaporin 2 collecting duct antibody, Aquaporin CD antibody, Aquaporin-2 antibody, Aquaporin-CD antibody, Aquaporin2 antibody, Aquaporine 2 antibody, Collecting duct water channel protein antibody, MGC34501 antibody, Water channel aquaporin 2 antibody, Water channel protein for renal collecting duct antibody, WCH CD antibody, WCH-CD antibody, WCHCD antibody
Target/Specificity	Aquaporin 2 (AQP2) is a hormonally regulated water channel located in the renal collecting duct. Mutations in the AQP2 gene cause hereditary nephrogenic diabetes insipidus in humans (Iolascon et al.,2007). A vasopressin induced cAMP increase results in the phosphorylation of AQP2 at serine-256 and its translocation from the intracellular vesicles to the apical membrane of principal cells (van Balkom et al., 2002). Recently, serine-261 has been identified as a novel phosphorylation site on AQP2 and levels of phosphorylated S261 have been shown to decrease with vasopressin treatment suggesting its involvement in vasopressin-dependent AQP2 trafficking (Hoffert et al., 2007)
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A
Format	Antigen Affinity Purified from Pooled Serum
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Aquaporin 2 (Ser261) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

Aquaporin 2 (AQP2) is a hormonally regulated water channel located in the renal collecting duct. Mutations in the AQP2 gene cause hereditary nephrogenic diabetes insipidus in humans (Iolascon et al.,2007). A vasopressin induced cAMP increase results in the phosphorylation of AQP2 at serine-256 and its translocation from the intracellular vesicles to the apical membrane of principal cells (van Balkom et al., 2002). Recently, serine-261 has been identified as a novel phosphorylation site on AQP2 and levels of phosphorylated S261 have been shown to decrease with vasopressin treatment suggesting its involvement in vasopressin-dependent AQP2 trafficking (Hoffert et al., 2007)

Images



Western blot of rat kidney lysate showing specific immunolabeling of the ~29 kDa and 37 kDa glycosylated form of the AQP2 protein phosphorylated at Ser261 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding non-phosphopeptide (not shown).