

Anti-Aquaporin 2 (Ser261) Antibody

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

Specification

Anti-Aquaporin 2 (Ser261) Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	<u>P34080</u>
Reactivity	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Calculated MW	28931

Anti-Aquaporin 2 (Ser261) Antibody - 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 (lolascon 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 IF~~1:50~200

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

Anti-Aquaporin 2 (Ser261) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Aquaporin 2 (Ser261) Antibody - 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).

Anti-Aquaporin 2 (Ser261) Antibody - 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)