10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Aquaporin 2 (Ser264) Antibody

Our Anti-Aquaporin 2 (Ser264) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutio

Catalog # AN1313

Specification

Anti-Aquaporin 2 (Ser264) Antibody - Product Information

Application	**WB**
Primary Accession	P34080
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**28931**

Anti-Aquaporin 2 (Ser264) 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 (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-264 has been identified as a novel phosphorylation site on AQP2 and shown to be regulated by vasopressin thus implicating this site as important in AQP2 trafficking and subcellular distribution (Fenton RA et al., 2008).

Dilution
WB~~1:1000

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 (Ser264) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

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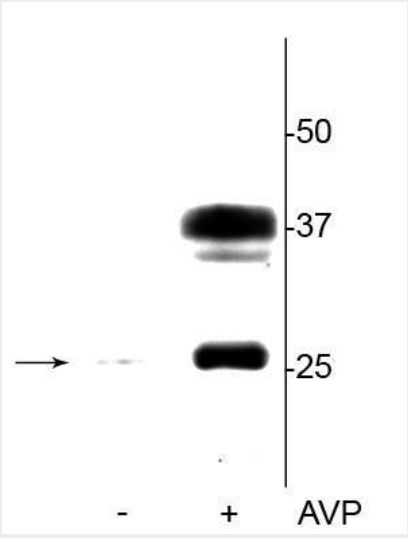
Blue Ice

Anti-Aquaporin 2 (Ser264) Antibody - 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

Anti-Aquaporin 2 (Ser264) 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 Ser264 in the vasopressin (AVP) treated lane (+), but not in the control lane (-).

Anti-Aquaporin 2 (Ser264) 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-264 has been identified as a novel phosphorylation site on AQP2 and shown to be regulated by vasopressin thus implicating this site as important in AQP2 trafficking and subcellular distribution (Fenton RA et al., 2008).