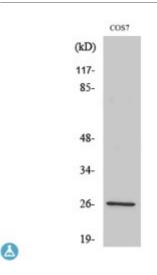


Anti-AQP2 antibody



Description Rabbit polyclonal to AQP2.

Model STJ91655

Host Rabbit

Reactivity Human, Mouse, Rat, Simian

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human AQP2 around the non-

phosphorylation site of S256.

Immunogen Region 200-280 aa

Gene ID <u>359</u>

Gene Symbol AQP2

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000

Specificity AQP2 Polyclonal Antibody detects endogenous levels of AQP2 protein.

Tissue Specificity Expressed in renal collecting tubules.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name 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

Molecular Weight 29 kDa

Clonality Polyclonal

Unconjugated Conjugation

IgG Isotype

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. **Formulation**

1 mg/ml Concentration

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:634OMIM:107777

Alternative 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

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.

Sequence and Domain Family Aquaporins contain two tandem repeats each containing three membrane-

spanning domains and a pore-forming loop with the signature motif Asn-Pro-

Ala (NPA).

Apical cell membrane Basolateral cell membrane Cytoplasmic vesicle **Cellular Localization**

> membrane Golgi apparatus, trans-Golgi network membrane. Shuttles from vesicles to the apical membrane. Vasopressin-regulated phosphorylation is required for translocation to the apical cell membrane. PLEKHA8/FAPP2 is

required to transport AQP2 from the TGN to sites where AQP2 is

phosphorylated.

Post-translational

Modifications

Ser-256 phosphorylation is necessary and sufficient for expression at the

apical membrane. Endocytosis is not phosphorylation-dependent.

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