

Rabbit Aquaporin 2 Polyclonal Antibody | anti-AQP2 antibody

Anti-Aquaporin 2 antibody

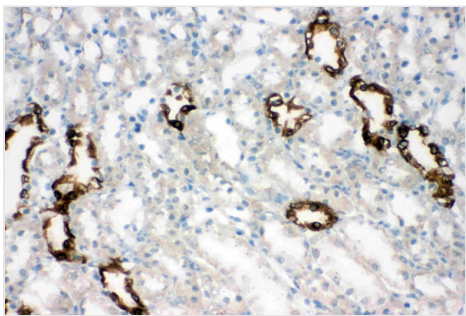
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA45104	Rabbit	Human, Mouse, Rat	Immunohistochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

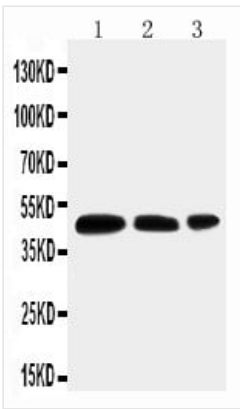
Aquaporin 2; Polyclonal Antibody; Anti-Aquaporin 2 antibody; Aquaporin-2(AQP-2); aquaporin 2(collecting duct); ADH water channel antibody; AQP 2 antibody; AQP CD antibody; AQP-2 antibody; AQP-CD antibody; AQP2 antibody; AQP2_HUMAN antibody; AQPCD antibody; Aquaporin 2 collecting duct antibody; Aquaporin 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; anti-AQP2 antibody

PRODUCT SPECIFICATIONS

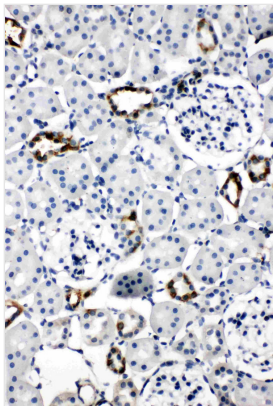
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized
Sequence Length	271
Applicable Applications for anti-AQP2 antibody	IHC (Immunohistochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Aquaporin 2 (245-260aa DWEEREVRRRQSVELH), identical to the related rat and mouse sequences.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Anti-Aquaporin 2 antibody, AAA45104, IHC(F)IHC(F): Rat Kidney Tissue



WB (Western Blot)
Anti-Aquaporin 2 antibody, AAA45104, Western blottingLane 1: MCF-7 Cell LysateLane 2: SW620 Cell LysateLane 3: HT1080 Cell Lysate



IHC (Immunohistochemistry)
Anti-Aquaporin 2 antibody, AAA45104, IHC(P)IHC(P): Rat Kidney Tissue

ADDITIONAL INFORMATION

Related Product Information for anti-AQP2 antibody	Description: Rabbit IgG polyclonal antibody for Aquaporin-2(AQP2) detection. Tested with WB, IHC-P, IHC-F in Human, Mouse, Rat. Background: AQP2(Aquaporin 2) also called AQUAPORIN-CD, is found in the apical cell membranes of the kidney's collecting duct principal cells and in intracellular vesicles located throughout the cell. The AQP2 gene is mapped to chromosome 12q13, very close to the site of major intrinsic protein by situ hybridization. The investigators suggested that a defect in the AQP2 gene is the basis of the autosomal form of nephrogenic diabetes insipidus. The functional expression and the limited localization suggested that AQP2 is the vasopressin-regulated water channel. Using rat kidney slices and porcine kidney cells stably expressing rat Aqp2, AQP2 trafficking can be stimulated by cAMP-independent pathways that utilize nitric oxide(NO). The NO donors sodium nitroprusside(SNP) and NONOate and the NO synthase substrate L-arginine mimicked the effect of vasopressin(VP), stimulating relocation of Aqp2 from cytoplasmic vesicles to the apical plasma membrane. SNP increased intracellular cGMP rather than cAMP, and exogenous cGMP stimulated AQP2 membrane insertion. Atrial natriuretic factor, which signals via cGMP, also stimulated AQP2 translocation. AQP2 expression in kidney connecting tubules is sufficient for survival and that AQP2 expression in collecting ducts is required to regulate body water balance. The S256L substitution in the cytoplasmic tail of the Aqp2 protein prevented phosphorylation at S256 and the subsequent accumulation of Aqp2 on the apical membrane of the collecting duct principal cells.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	728874
NCBI GeneID	359
UniProt Accession #	P41181; Q9UD68

Molecular Weight	28,837 Da
NCBI Official Full Name	Aquaporin-2
NCBI Official Synonym Full Names	aquaporin 2 (collecting duct)
NCBI Official Symbol	AQP2
NCBI Official Synonym Symbols	AQP-CD; WCH-CD
NCBI Protein Information	aquaporin-2; AQP-2; aquaporin-CD; ADH water channel; water-channel aquaporin 2; collecting duct water channel protein; water channel protein for renal collecting duct
UniProt Protein Name	Aquaporin-2
UniProt Gene Name	AQP2
UniProt Synonym Gene Names	AQP-2; AQP-CD
UniProt Entry Name	AQP2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aquaporin-2-antibody-immunohistochemistry-immunohistochemistry-western-blot-elisa/45104>