

Datasheet for ABIN6656925
anti-AQP2 antibody (C-Term)

2 Images



[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	AQP2
Binding Specificity:	C-Term
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AQP2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	Aquaporin 2 Antibody
Immunogen:	Aquaporin 2 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a synthetic peptide corresponding to the C-terminal region of rat aquaporin 2.
Isotype:	IgG
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Aquaporin 2 from Human, Mouse, and Rat based on 100 % homology with the immunizing sequence.
Purification:	Anti-Aquaporin 2 Antibody was purified by affinity chromatography.
Sterility:	Sterile filtered

Target Details

Target:	AQP2
Alternative Name:	Aquaporin 2 (AQP2 Products)
Background:	<p>Synonyms: AQP2, AQP-CD, AQPCD, WCH CD, Aquaporin-2, AQP-2, ADH water channel, Aquaporin-CD, QP-CD, Collecting duct water channel protein, WCH-CD, Water channel protein for renal collecting duct</p> <p>Background: Aquaporins selectively conduct water molecules in and out of the cell, while preventing the passage of ions and other solutes. Known as water channels, they are integral membrane pore proteins. Aquaporin 2 is the vasopressin-regulated water channel of the apical membrane of collecting duct cells. It is located in kidney epithelial cells and usually lies dormant in intracellular vesicle membranes. When it is needed vasopressin binds to the cell surface vasopressin receptor, activating a signaling pathway that cause AQP2 containing vesicles to fuse with the plasma membrane so the AQP2 can be used by the cell. Defects in AQP2 area cause of an autosomal dominant form of nephrogenic diabetes insipidus (NDI).</p> <p>Gene Name: Aqp2</p>
Gene ID:	25386
NCBI Accession:	NP_037041
UniProt:	P34080
Pathways:	Response to Water Deprivation

Application Details

Application Notes:	Immunohistochemistry_Dilution: 1:200 IF_Microscopy_Dilution: 1:400 Western_Blots_Dilution: 1:1000 - 1:4000
Comment:	Anti-Aquaporin 2 Antibody is tested for use in WB, IHC, and IF microscopy. Expect a band approximately ~28.5kDa on specific lysates. May detect larger glycosylated bands ~35-50kDa. Specific conditions for reactivity should be optimized by the end user.
Restrictions:	For Research Use only

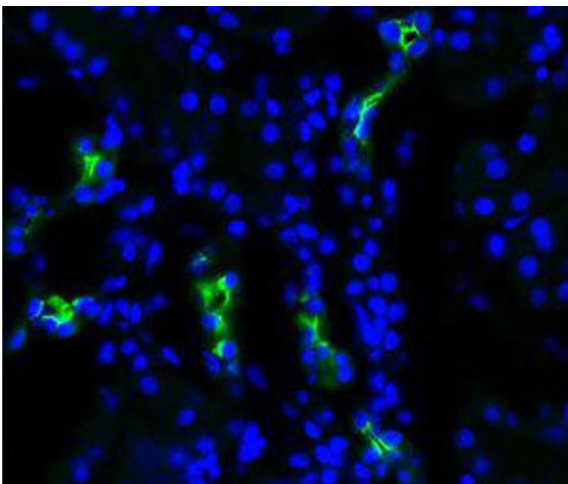
Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 50 % (v/v) Glycerol

Handling

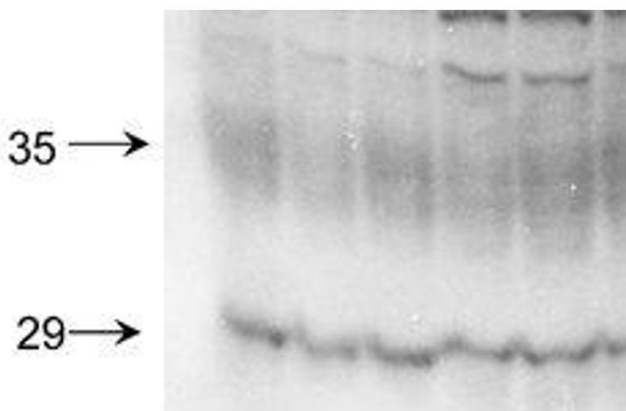
	Preservative: 0.1 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Immunofluorescence

Image 1. Aquaporin 2 Immunofluorescence. Immunofluorescence Microscopy of Rabbit anti-Aquaporin-2 antibody. Tissue: Rat kidney. Fixation: N/A. Primary Antibody: Aquaporin-2 at 1:200 for 1h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min RT. Localization: Cytoplasmic vesicle membrane. Staining: anti-Aquaporin-2 green fluorescent with DAPI stain merge.



Western Blotting

Image 2. Aquaporin 2 Western Blot. Western Blot of Rabbit anti-Aquaporin-2 Antibody. Lane 1-6: Rat kidney tissues. Load: 20ug per lane. Primary antibody: Aquaporin 2 at 1:2000 for overnight at 4°C. Secondary antibody: Goat anti-rabbit IgG HRP antibody at 1:40,000 for 45 min at RT. Block: 5% Biotin overnight at 4°C. Predicted/Observed size: ~28.5kDa. May detect larger glycosylated bands ~35-50kDa.