

Datasheet for ABIN863207
anti-AQP2 antibody (C-Term)[Go to Product page](#)

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Overview

Quantity:	100 µg
Target:	AQP2
Binding Specificity:	C-Term
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	Produced against the C-terminal peptide (Sequence N-CLKGLEPDTDWEEREVRRRQ) of rat aquaporin 2
Specificity:	Detects ~28.8 kDa. May detect larger glycosylated bands ~35-50 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein A Purified

Target Details

Target:	AQP2
Alternative Name:	Aquaporin 2 (AQP2 Products)
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

Target Details

proteins (1, 2). 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 (3). Defects in AQP2 area cause of an autosomal dominant form of nephrogenic diabetes insipidus (NDI) (4).

Gene ID: 25386

NCBI Accession: [NP_037041](#)

UniProt: [P34080](#)

Pathways: [Response to Water Deprivation](#)

Application Details

Application Notes:

- WB (1:2000)
- IHC (1:200)
- ICC/IF (1:400)
- optimal dilutions for assays should be determined by the user.

Comment: 0.5 µg/ml of ABIN863207 was sufficient for detection of aquaporin 2 in 10 µg of rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

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: -20 °C

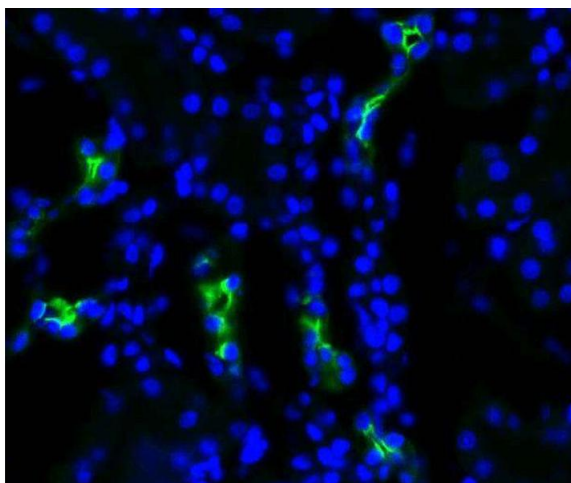
Storage Comment: -20°C

Publications

Product cited in: Sim, Himmel, Redd, Pulous, Rogers, Black, Hong, von Bergen, Blount: "Absence of PKC-alpha attenuates lithium-induced nephrogenic diabetes insipidus." in: **PLoS ONE**, Vol. 9, Issue 7, pp. e101753, (2014) ([PubMed](#)).

van der Lubbe, Lim, Meima, van Veghel, Rosenbaek, Mutig, Danser, Fenton, Zietse, Hoorn: "Aldosterone does not require angiotensin II to activate NCC through a WNK4-SPAK-dependent pathway." in: **Pflügers Archiv : European journal of physiology**, Vol. 463, Issue 6, pp. 853-63, (2012) ([PubMed](#)).

Images



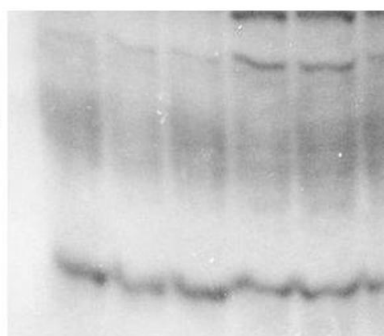
Immunohistochemistry

Image 1. Immunohistochemistry analysis using Rabbit Anti-Aquaporin 2 Polyclonal Antibody . Tissue: kidney tissue. Species: Rat. Primary Antibody: Rabbit Anti-Aquaporin 2 Polyclonal Antibody at 1:200. Secondary Antibody: FITC Goat Anti-Rabbit (green).

AQP2

35 →

29 →



Western Blotting

Image 2. Western blot analysis of Rat kidney inner medullary homogenates showing detection of Aquaporin 2 protein using Rabbit Anti-Aquaporin 2 Polyclonal Antibody . Primary Antibody: Rabbit Anti-Aquaporin 2 Polyclonal Antibody at 1:2000. Showing glycosylated and non-glycosylated bands.