

**Aquaporin 1 Antibody**  
Catalog # ASM10483

**Specification**

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**Aquaporin 1 Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">P29975</a>
Other Accession	<a href="#">NP_036910.1</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal

**Description**

Rabbit Anti-Rat Aquaporin 1 Polyclonal

**Target/Specificity**

Detects ~28.5kDa. May detect larger glycosylated bands ~35-50kDa.

**Other Names**

AQP1 Antibody, AQP 1 Antibody, AQP CHIP Antibody, AQP-1 Antibody, AQP1 Antibody, AQP1\_HUMAN Antibody, Aquaporin CHIP Antibody, Aquaporin-1 Antibody, Aquaporin-CHIP Antibody, Aquaporin1 Antibody, Channel forming integral protein 28kDa Antibody, Channel like integral membrane protein 28 kDa Antibody, CHIP 28 Antibody, CHIP28 Antibody, CO Antibody, Colton blood group Antibody, Growth factor induced delayed early response protein Antibody, MGC26324 Antibody, Urine water channel Antibody, Water channel protein CHIP 29 Antibody, Water channel protein CHIP29 Antibody, Water channel protein for red blood cells and kidney proximal tubule Antibody

**Immunogen**

Produced against the N-terminal peptide (sequence N-MASEFKKKLF) of rat Aquaporin 1

**Purification**

Protein A Purified

Storage -20°C

**Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature Blue Ice or 4°C

**Certificate of Analysis**

0.5 µg/ml of SPC-502 was sufficient for detection of aquaporin 1 in 10 µg of rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

**Cellular Localization**

Membrane

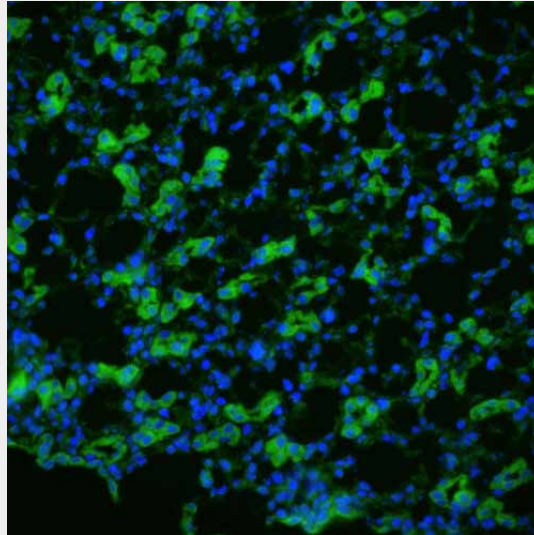
**Aquaporin 1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

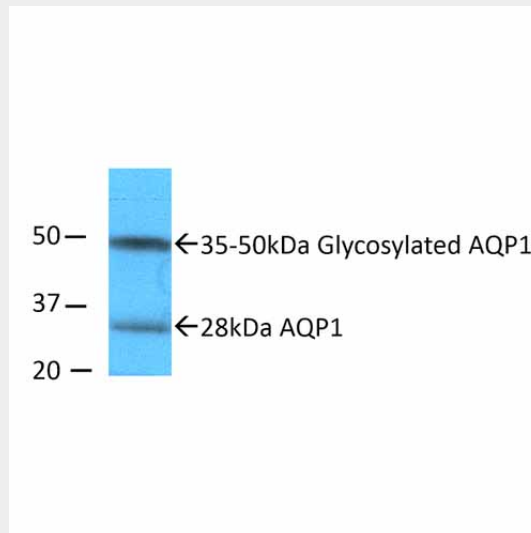
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Aquaporin 1 Antibody - Images



Immunohistochemistry analysis using Rabbit Anti-Aquaporin 1 Polyclonal Antibody (ASM10483). Tissue: kidney tissue. Species: Rat. Primary Antibody: Rabbit Anti-Aquaporin 1 Polyclonal Antibody (ASM10483) at 1:200. Secondary Antibody: FITC Goat Anti-Rabbit (green).



Western blot analysis of Rat kidney inner medullary homogenates showing detection of Aquaporin 1 protein using Rabbit Anti-Aquaporin 1 Polyclonal Antibody (ASM10483). Primary Antibody: Rabbit Anti-Aquaporin 1 Polyclonal Antibody (ASM10483) at 1:2000. Showing glycosylated and non-glycosylated bands.

### Aquaporin 1 Antibody - 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 (1, 2). Aquaporin 1 is a widely expressed water channel, found in the basolateral and apical plasma membranes of the proximal tubes, the descending loop of Henel and in the descending portion of the vasa recta. Additionally it is found in red blood cells, vascular endothelium, gastrointestinal tract, sweat glands and lungs. It is not regulated by vasopressin (3).

#### **Aquaporin 1 Antibody - References**

1. Gonen T., Walz T. (2006) Q. Rev. Biophys. 39(4): 361-396.
2. Knepper M.A. (1994) Proc Natl. Acad Sci. USA. 91(14): 6255-6258.
3. [www.vivo.colostate.edu/hbooks/molecules/aquaporins.html](http://www.vivo.colostate.edu/hbooks/molecules/aquaporins.html)