

Datasheet for ABIN863208  
**anti-AQP3 antibody (C-Term)**



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### Overview

Quantity:	100 µg
Target:	AQP3
Binding Specificity:	C-Term
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AQP3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

### Product Details

Immunogen:	Produced against the C-terminal peptide (Sequence N-CHLEQPPPSTEAEENVKLAHMKHKEQI) of rat aquaporin 3
Specificity:	Detects ~31.5 kDa. May detect larger glycosylated bands ~35-50 kDa.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein A Purified

### Target Details

Target:	AQP3
Alternative Name:	Aquaporin 3 ( <a href="#">AQP3 Products</a> )

## Target Details

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**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 3 is found in the basolateral cell membrane of principal collecting duct cells and provide a pathway for water to exit these cells (3). AQP3 gene expression is not regulated by vasopressin (4).

**Gene ID:** 65133

**NCBI Accession:** [NP\\_113891](#)

**UniProt:** [P47862](#)

## Application Details

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**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 ABIN863208 was sufficient for detection of aquaporin 3 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

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**Format:** Liquid

**Concentration:** 1 mg/mL

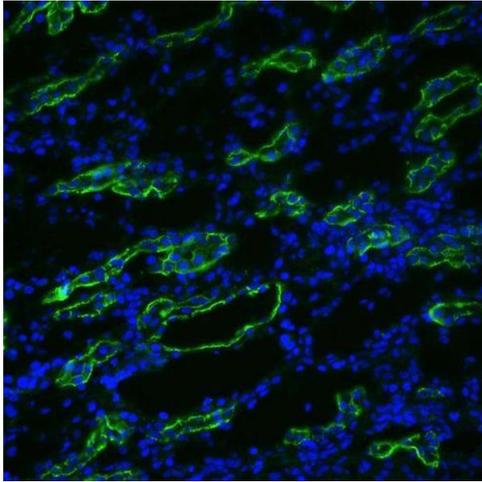
**Buffer:** PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

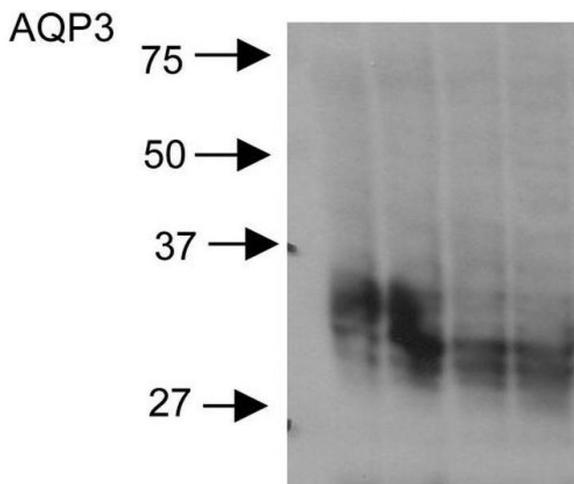
**Storage:** -20 °C

**Storage Comment:** -20°C



### Immunohistochemistry

**Image 1.** Immunohistochemistry analysis using Rabbit Anti-Aquaporin 3 Polyclonal Antibody . Tissue: kidney tissue. Species: Rat. Primary Antibody: Rabbit Anti-Aquaporin 3 Polyclonal Antibody at 1:200. Secondary Antibody: FITC Goat Anti-Rabbit (green).



### Western Blotting

**Image 2.** Western blot analysis of Rat kidney inner medullary homogenates showing detection of Aquaporin 3 protein using Rabbit Anti-Aquaporin 3 Polyclonal Antibody . Primary Antibody: Rabbit Anti-Aquaporin 3 Polyclonal Antibody at 1:2000.



**Successfully validated (Immunofluorescence (IF))**

by [Centre de Recherche en Transplantation et Immunologie, UMR1064, Université de Nantes](#)

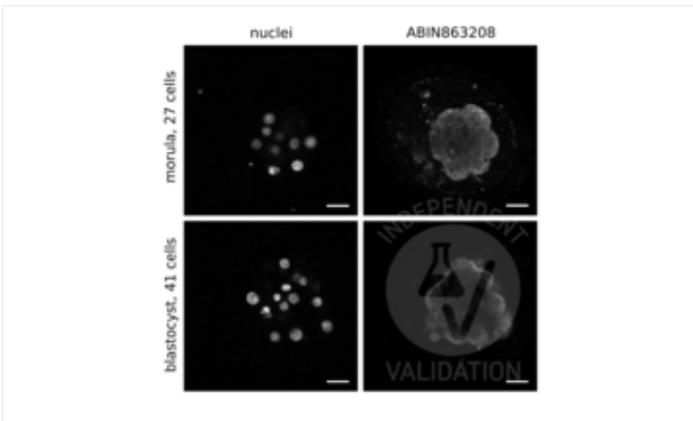
Report Number: 102635

Date: Dec 14 2018

Target:	AQP3
Lot Number:	160308
Method validated:	Immunofluorescence (IF)
Positive Control:	Membrane staining in compacted morula; membrane staining apical side, on early blastocysts
Negative Control:	Cells not expressing AQP3 mRNA within human embryos (inner cell mass) No primary control
Notes:	Passed. ABIN863208 specifically labels the targeted antigen in embryos in IF. No signal was detected in sample negative control tissue and the secondary antibody only control.
Primary Antibody:	ABIN863208
Secondary Antibody:	donkey anti-rabbit antibody (Life Technologies, A21206)
Protocol:	<ul style="list-style-type: none"><li>• Fixation<ul style="list-style-type: none"><li>◦ Fix embryos in one drop of 30µl of 4% paraformaldehyde for 5min at RT.</li><li>◦ Remove embryos and wash quickly three times with PBS containing 0.1% BSA (in three drops of 30µl).</li></ul></li><li>• Staining:<ul style="list-style-type: none"><li>◦ Permeabilize embryo in 300µl <a href="#">IF buffer</a> for 60min at RT.</li><li>◦ Incubate embryo with the primary rabbit anti-AQP3 antibody (antibodies-online, ABIN863208, 160308) diluted 1:400 in buffer ON at 4°C.</li><li>◦ Rinse embryo in IF buffer quickly three times.</li><li>◦ Incubate embryo with secondary donkey anti-rabbit antibody (Life Technologies, A21206) diluted 1:1000 in buffer for 2h at RT.</li><li>◦ Rinse embryo in PBS-BSA.</li><li>◦ At this point, the embryos can either be kept in PBS-BSA ON at 4°C or used for imaging directly on ibido µ-Slide.</li><li>◦ Image acquisition on a microscope using appropriate filters, 20x oil-immersion objective.</li></ul></li></ul>
Experimental Notes:	Labeling of human embryo with the aquaporin 3 antibody ABIN863208 shows the expected staining pattern membrane-associated outside of the blastocyst. The background staining in our conditions is a bit high and might be improved with more stringent washes or different

fixation-permeabilization protocols.

Image for Validation report #102635



**Validation image no. 1 for anti-Aquaporin 3 (Gill Blood Group) (AQP3) (C-Term) antibody (ABIN863208)**

Immunofluorescence analysis of human embryo using ABIN863208. AQP3 (right) with nuclear counterstaining (left) at indicated stages. In the top panel (morula), the staining is located at the membrane. In the bottom panel (early blastocyst), the staining is located at the membrane, in trophectoderm cells. Scale bar = 47 $\mu$ m.