


# Anti-Aquaporin 2 antibody ab110496

★★★★★ [1 Abreviews](#) [1 References](#) [1 Image](#)

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Aquaporin 2 antibody   |
| <b>Description</b>         | Rabbit polyclonal to Aquaporin 2  |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human<br><b>Predicted to work with:</b> Sheep, Cow, Dog, Pig, Chimpanzee, Macaque monkey, Gorilla, Orangutan   |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.   |
| <b>Positive control</b>    | This antibody gave a positive signal in Human, Mouse and Rat Kidney tissue lysates.   |
| <b>General notes</b>       | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

### Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.   |
| <b>Storage buffer</b>       | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituent: PBS<br><br>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help. |
| <b>Purity</b>               | Immunogen affinity purified  |
| <b>Clonality</b>            | Polyclonal   |

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab110496 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| WB          |           | Use a concentration of 1 µg/ml. Detects a band of approximately 37 kDa (predicted molecular weight: 29 kDa). |

## Target

### Function

Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.

### Tissue specificity

Expressed in renal collecting tubules.

### Involvement in disease

Diabetes insipidus, nephrogenic, autosomal

### Sequence similarities

Belongs to the MIP/aquaporin (TC 1.A.8) family.

### Domain

Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).

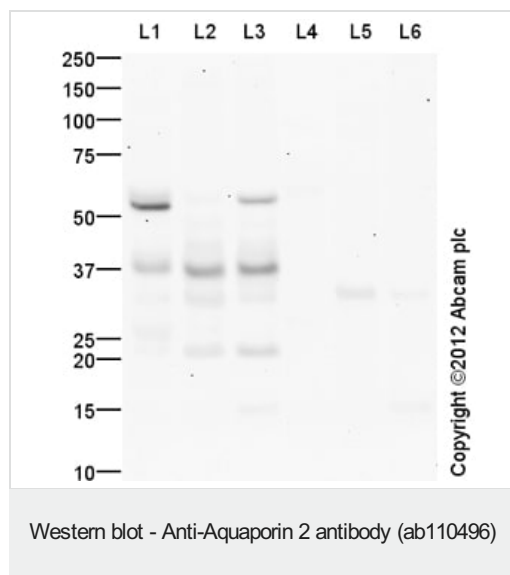
### Post-translational modifications

Ser-256 phosphorylation is necessary and sufficient for expression at the apical membrane. Endocytosis is not phosphorylation-dependent.

### Cellular localization

Apical cell membrane. Basolateral cell membrane. Cytoplasmic vesicle membrane. Golgi apparatus, trans-Golgi network membrane. Shuttles from vesicles to the apical membrane. Vasopressin-regulated phosphorylation is required for translocation to the apical cell membrane. PLEKHA8/FAPP2 is required to transport AQP2 from the TGN to sites where AQP2 is phosphorylated.

## Images



**All lanes :** Anti-Aquaporin 2 antibody (ab110496) at 1 µg/ml

**Lane 1 :** Human kidney tissue lysate - total protein (**ab30203**)

**Lane 2 :** Kidney (Mouse) Tissue Lysate

**Lane 3 :** Kidney (Rat) Tissue Lysate

**Lane 4 :** Human kidney tissue lysate - total protein (**ab30203**) with Immunising peptide at 1 µg/ml

**Lane 5 :** Kidney (Mouse) Tissue Lysate with Immunising peptide at 1 µg/ml

**Lane 6 :** Kidney (Rat) Tissue Lysate with Immunising peptide at 1 µg/ml

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 29 kDa

**Observed band size:** 37 kDa

**Additional bands at:** 22 kDa, 53 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 16 minutes

Aquaporin 2 contains a potential glycosylation site (SwissProt) which may explain its migration at a higher molecular weight than predicted.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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