




## Product datasheet

### Anti-Aquaporin 4 antibody [4/18] ab9512

★★★★★ [7 Abreviews](#) [44 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	Anti-Aquaporin 4 antibody [4/18]
<b>Description</b>	Mouse monoclonal [4/18] to Aquaporin 4
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IHC-Fr, IHC-FoFr, ELISA, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Rabbit, Human, Zebrafish <b>Predicted to work with:</b> Cow 
<b>Immunogen</b>	Synthetic peptide: VIDIDRGDEKKGKDSSGE , corresponding to amino acids 301-318 of Aquaporin 4  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Epitope</b>	Intracellular C-terminal AQP 4 epitope
<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). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.097% Sodium azide Constituents: PBS, 0.1% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	4/18
<b>Isotype</b>	IgG3

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9512 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
IHC-P	★★★★★ (4)	1/100. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol.
IHC-Fr	★★★★★ (1)	Use at an assay dependent concentration.
IHC-FoFr	★★★★★ (2)	Use at an assay dependent concentration. PubMed: 22438975
ELISA		Use at an assay dependent concentration. PubMed: 11595449
WB		Use at an assay dependent concentration. Predicted molecular weight: 35 kDa. PubMed: 19831719

## Target

### Function

Forms a water-specific channel. Osmoreceptor which regulates body water balance and mediates water flow within the central nervous system.

### Tissue specificity

Brain - muscle >> heart, kidney, lung, and trachea.

### 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).

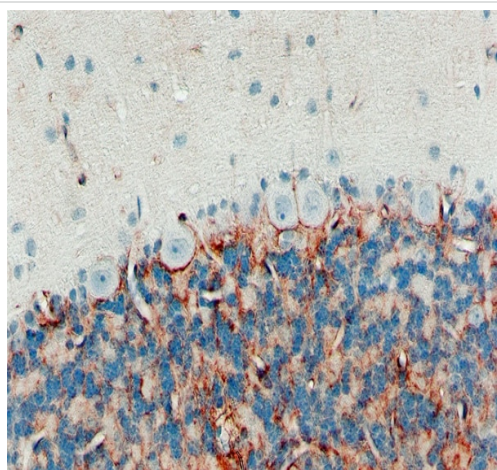
### Post-translational modifications

Phosphorylation by PKC at Ser-180 reduces conductance by 50%. Phosphorylation by PKG at Ser-111 in response to glutamats increases conductance by 40%.

### Cellular localization

Membrane.

## Images



Immunohistochemical staining of aquaporin 4 in rat brain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 4 antibody [4/18] (ab9512)

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

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- Valid for 12 months from date of delivery
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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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