


Product datasheet

Anti-Aquaporin 4 antibody [4/18] ab9512

★★★★★ 7 Abreviews 37 References 1 Image

Overview

Product name	Anti-Aquaporin 4 antibody [4/18]
Description	Mouse monoclonal [4/18] to Aquaporin 4
Host species	Mouse
Tested applications	Suitable for: IHC-P, IHC-Fr, IHC-FoFr, ELISA, WB
Species reactivity	Reacts with: Mouse, Rat, Rabbit, Human, Zebrafish Predicted to work with: Cow 
Immunogen	Synthetic peptide: VIDIDRGDEKKGKDSSGE , corresponding to amino acids 301-318 of Aquaporin 4 Run BLAST with Run BLAST with
Epitope	Intracellular C-terminal AQP 4 epitope
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.097% Sodium azide Constituents: PBS, 0.1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	4/18
Isotype	IgG3

Light chain type

kappa

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).

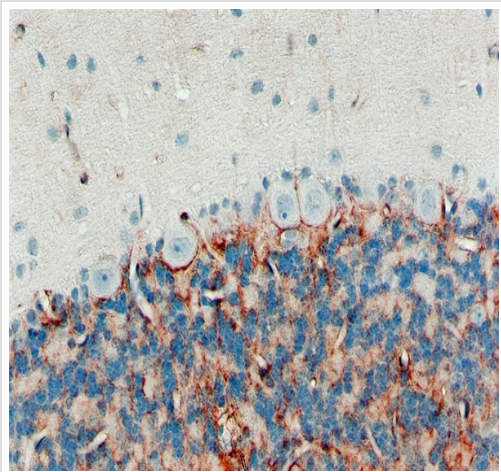
Post-translational modifications

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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