

Datasheet for ABIN863209
anti-Aquaporin 4 antibody (C-Term)



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2 Images

1 Publication

Overview

| | |
|----------------------|--|
| Quantity: | 100 µg |
| Target: | Aquaporin 4 (AQP4) |
| Binding Specificity: | C-Term |
| Reactivity: | Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This Aquaporin 4 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF) |

Product Details

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|-------------------|--|
| Immunogen: | Produced against the C-terminal peptide (Sequence N-CTKGSYMEVEDNRSQVETED) of rat aquaporin 4 |
| Specificity: | Detects ~35 kDa. May detect larger glycosylated bands ~50 kDa. |
| Cross-Reactivity: | Human, Mouse, Rat |
| Purification: | Protein A Purified |

Target Details

| | |
|-------------------|---|
| Target: | Aquaporin 4 (AQP4) |
| Alternative Name: | Aquaporin 4 (AQP4 Products) |

Target Details

| | |
|-----------------|---|
| 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 4 is constitutively expressed in the basolateral cell membrane of principal collecting duct cells in the kidney and provide a pathway for water to exit these cells (3). It is also expressed in astrocytes and is up regulated by direct insult to the CNS (4). Aquaporin 4 has been proposed as the primary autoimmune target in neuromyelitis optica (5, 6). |
| Gene ID: | 25293 |
| NCBI Accession: | NP_036957 |
| UniProt: | P47863 |
| Pathways: | Sensory Perception of Sound |

Application Details

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|--------------------|--|
| Application Notes: | <ul style="list-style-type: none">• 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 ABIN863209 was sufficient for detection of aquaporin 4 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 |

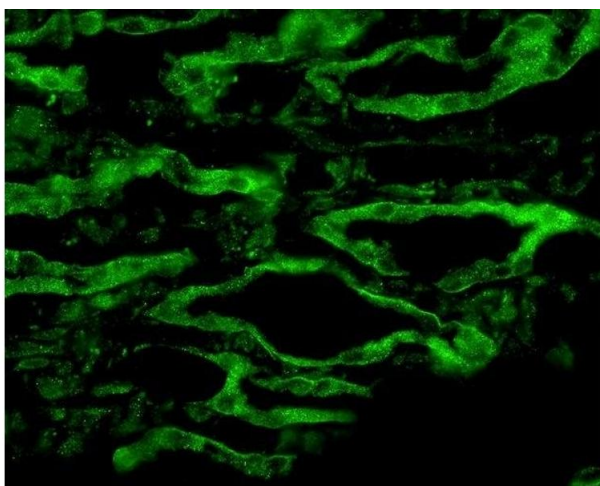
Handling

| | |
|--------------------|--|
| 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 |

Publications

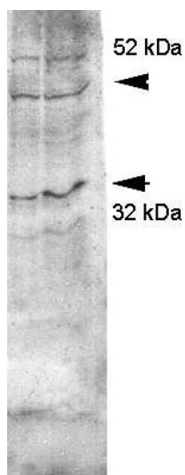
Product cited in: Gatto, Amin, Deyoung, Hey, Mareci, Magin: "Ultra-High Field Diffusion MRI Reveals Early Axonal Pathology in Spinal Cord of ALS mice." in: **Translational neurodegeneration**, Vol. 7, pp. 20, (2018) ([PubMed](#)).

Images



Immunohistochemistry

Image 1. Immunohistochemistry analysis using Rabbit Anti-Aquaporin 4 Polyclonal Antibody (ABIN863209). Tissue: kidney tissue. Species: Rat. Fixation: 4 % paraformaldehyde-lysine-periodate. Primary Antibody: Rabbit Anti-Aquaporin 4 Polyclonal Antibody (ABIN863209) at 1:200 for 75 min at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) for 1 hour at RT. 4 μ m cryostat sections.



Western Blotting

Image 2. Western Blotting 1 in 2000 rat kidney lysate glycos and non glycos.