

## Product Datasheet

### Anti-Aquaporin 4/AQP4 Antibody (orb1145837)

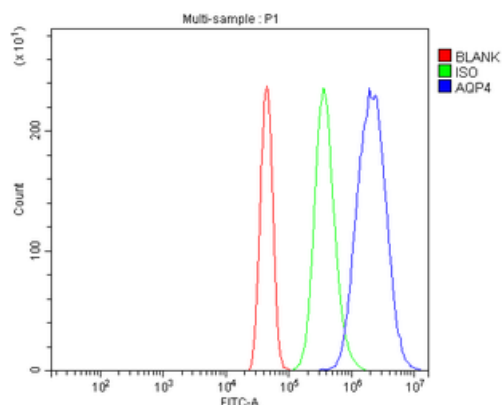
|                            |   |
|----------------------------|---|
| <b>Description</b>         | Anti-Aquaporin 4/AQP4 Antibody. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.   |
| <b>Species/Host</b>        | Rabbit  |
| <b>Reactivity</b>          | Human, Mouse, Rat   |
| <b>Conjugation</b>         | Unconjugated  |
| <b>Tested Applications</b> | ELISA, FC, IHC, WB  |
| <b>Immunogen</b>           | E.coli-derived human Aquaporin 4/AQP4 recombinant protein (Position: L247-V323).  |
| <b>Form/Appearance</b>     | Lyophilized   |
| <b>Concentration</b>       | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.   |
| <b>Storage</b>             | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.   |
| <b>Note</b>                | For research use only   |
| <b>Application notes</b>   | Western blot, 0.25-0.5 µg/ml, Human, Mouse, Rat<br>Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 µg/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 µg/ml, -. Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml |
| <b>Isotype</b>             | Rabbit IgG  |
| <b>Clonality</b>           | Polyclonal  |
| <b>MW</b>                  | 32 kDa  |
| <b>Uniprot ID</b>          | <b>P55087</b>   |
| <b>Expiration Date</b>     | 12 months from date of receipt.   |

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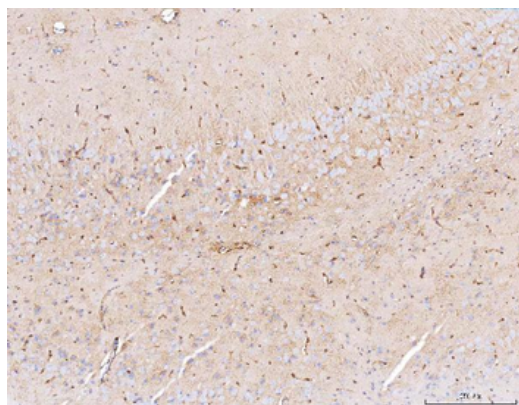
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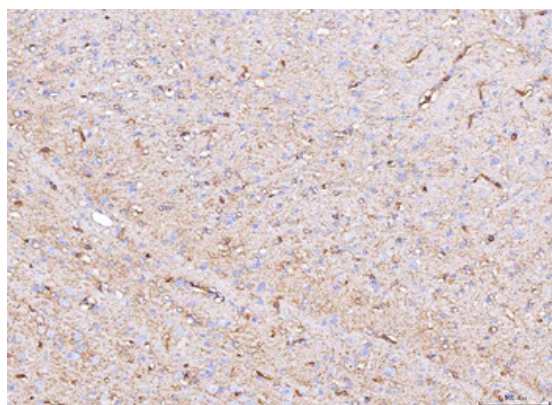
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Flow Cytometry analysis of A431 cells using anti-Aquaporin 4/AQP4 antibody. Overlay histogram showing A431 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Aquaporin 4/AQP4 Antibody (1  $\mu\text{g}/1 \times 10^6$  cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10  $\mu\text{g}/1 \times 10^6$  cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1  $\mu\text{g}/1 \times 10^6$ ) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IHC analysis of Aquaporin 4/AQP4 using anti-Aquaporin 4/AQP4 antibody. Aquaporin 4/AQP4 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu\text{g}/\text{ml}$  rabbit anti-Aquaporin 4/AQP4 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



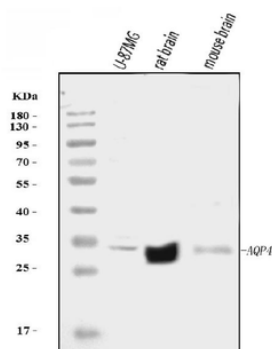
IHC analysis of Aquaporin 4/AQP4 using anti-Aquaporin 4/AQP4 antibody. Aquaporin 4/AQP4 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu\text{g}/\text{ml}$  rabbit anti-Aquaporin 4/AQP4 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.

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Western blot analysis of Aquaporin 4/AQP4 using anti-Aquaporin 4/AQP4 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human U-87MG whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aquaporin 4/AQP4 antigen affinity purified polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Aquaporin 4/AQP4 at approximately 32 kDa. The expected band size for Aquaporin 4/AQP4 is at 32 kDa.

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