

## Product Datasheet

### Aquaporin 4/AQP4 Antibody (orb308770)

<b>Catalog Number</b>	orb308770
<b>Category</b>	Antibodies
<b>Description</b>	Aquaporin 4/AQP4 Antibody
<b>Clonality</b>	Polyclonal
<b>Species/Host</b>	Rabbit
<b>Isotype</b>	Rabbit IgG
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse, Rat
<b>Form/Appearance</b>	Lyophilized
<b>Concentration</b>	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
<b>Purification</b>	Immunogen affinity purified.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human Aquaporin 4, different from the related mouse sequence by two amino acids, and from the related rat sequence by three amino acids.
<b>UniProt ID</b>	<b>P55087</b>
<b>MW</b>	37 kDa
<b>Tested applications</b>	IHC, WB

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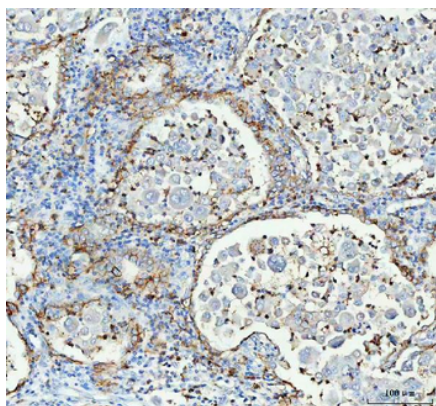
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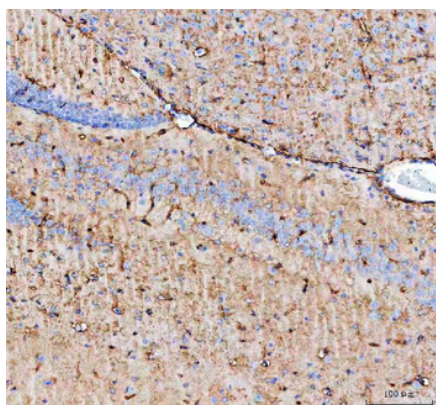
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<b>Application notes</b>	Western blot, 0.1-0.5µg/ml, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5µg/ml, Human, Mouse, Rat Immunohistochemistry (Frozen Section), 0.5-1µg/ml, Mouse, Rat. Add 0.2ml of distilled water will yield a concentration of 500ug/ml
<b>Cross Reactivity</b>	No cross-reactivity with other proteins
<b>Antibody Type</b>	Primary Antibody
<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



IHC analysis of Aquaporin 4 using anti-Aquaporin 4 antibody. Aquaporin 4 was detected in a paraffin-embedded section of human lung cancer 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 µg/ml rabbit anti-Aquaporin 4 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 using anti-Aquaporin 4 antibody. Aquaporin 4 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 µg/ml rabbit anti-Aquaporin 4 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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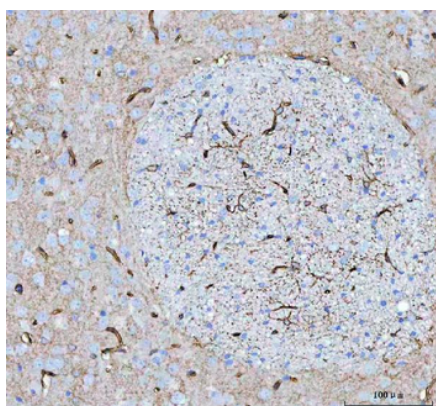
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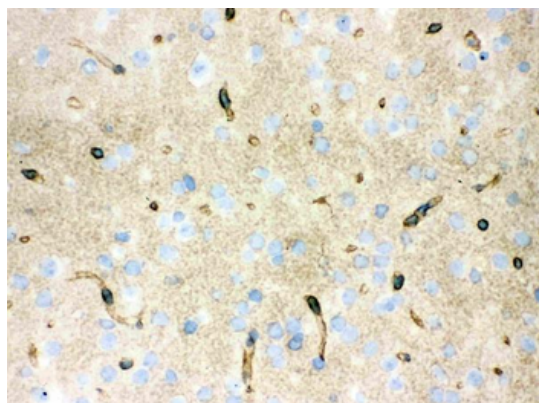
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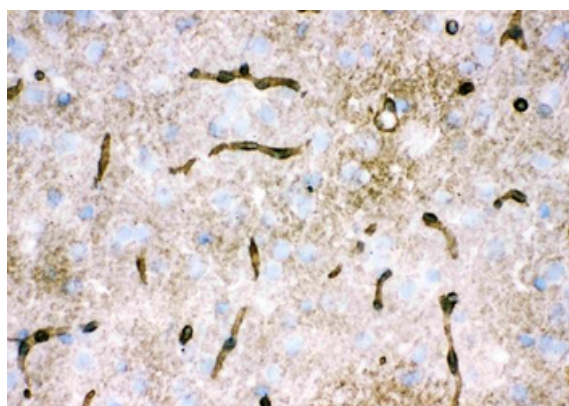
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IHC analysis of Aquaporin 4 using anti-Aquaporin 4 antibody. Aquaporin 4 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μg/ml rabbit anti-Aquaporin 4 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 using anti-Aquaporin 4 antibody. Aquaporin 4 was detected in frozen section of Mouse Brain Tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μg/ml rabbit anti-Aquaporin 4 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC analysis of Aquaporin 4 using anti-Aquaporin 4 antibody. Aquaporin 4 was detected in frozen section of Rat Brain Tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μg/ml rabbit anti-Aquaporin 4 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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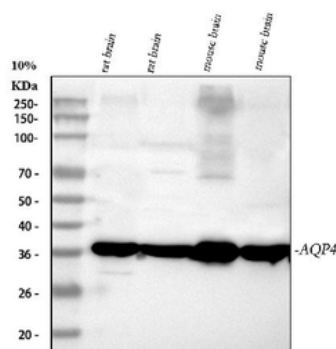
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Western blot analysis of Aquaporin 4 using anti-Aquaporin 4 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse brain tissue lysates, Lane 4: 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 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 at approximately 37 kDa. The expected band size for Aquaporin 4 is at 35 kDa.

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