

# Aquaporin 4 Polyclonal antibody

Catalog Number: 16473-1-AP

Featured Product

113 Publications

## Basic Information

## Catalog Number:

16473-1-AP

## Concentration:

700 µg/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG9561

## GenBank Accession Number:

BC022286

## GeneID (NCBI):

361

## UNIPROT ID:

P55087

## Full Name:

Aquaporin 4

## Calculated MW:

323 aa, 35 kDa

## Observed MW:

35-37 kDa, 32-34 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB: 1:2000-1:10000

IP: 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC: 1:100-1:2500

IF-P: 1:50-1:500

## Applications

## Tested Applications:

WB, IHC, IF-P, IP, ELISA

## Cited Applications:

WB, IHC, IF, IP

## Species Specificity:

human, mouse, rat

## Cited Species:

human, mouse, rat, pig, chicken

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Positive Controls:

**WB**: mouse liver tissue, SKOV-3 cells, mouse kidney tissue, mouse heart tissue, mouse brain tissue, rat brain tissue, rat heart tissue

**IP**: mouse heart tissue,

**IHC**: mouse brain tissue, human brain tissue, rat brain tissue, mouse heart tissue, human kidney tissue

**IF-P**: rat brain tissue, mouse brain tissue

## Background Information

Aquaporins are specialized water transport channels in plasma membranes of water-permeable tissues. Aquaporin-4 (AQP4) is the most abundant water channel in the human central nervous system and is important to fluid movements in brain. Aquaporin-4 exists as two isoforms, a long (M1) isoform with translation initiation at Met-1, and a shorter (M23) isoform with translation initiation at Met-23, with molecular weights around 35-37 kDa and 32-34 kDa, respectively.

## Notable Publications

| Author           | Pubmed ID | Journal             | Application |
|------------------|-----------|---------------------|-------------|
| Chengcheng Zhang | 26459070  | Mol Med Rep         | IF          |
| Xue Ma           | 34526069  | J Neuroinflammation | IF          |
| Jiajun Cai       | 36115513  | Brain Res Bull      | WB          |

## Storage

## Storage:

Store at -20°C. Stable for one year after shipment.

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

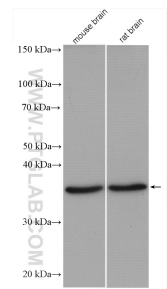
For technical support and original validation data for this product please contact:

T: 4006900926

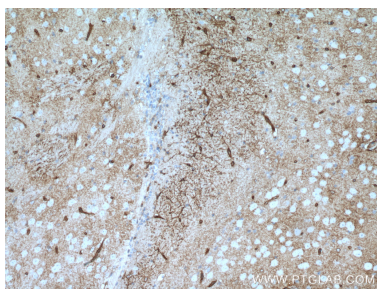
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

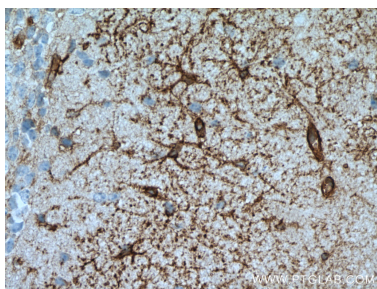
Selected Validation Data



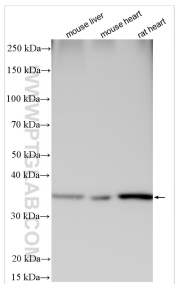
Various lysates were subjected to SDS PAGE followed by western blot with 16473-1-AP (Aquaporin 4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



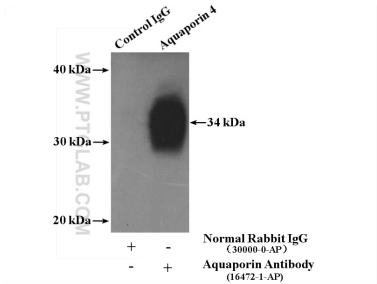
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16473-1-AP (Aquaporin 4 antibody) at dilution of 1:2000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



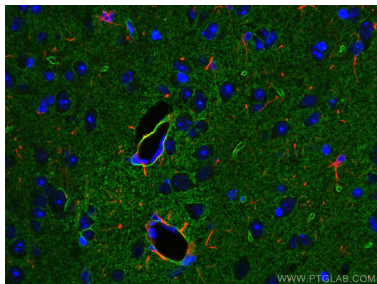
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16473-1-AP (Aquaporin 4 antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



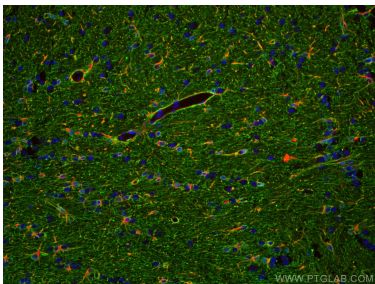
Various lysates were subjected to SDS PAGE followed by western blot with 16473-1-AP (Aquaporin 4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP result of anti-Aquaporin 4 (IP:16473-1-AP, 4ug; Detection:16473-1-AP 1:300) with mouse heart tissue lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using Aquaporin 4 antibody (16473-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), GFAP antibody (60190-1-Ig, Clone: 4B2E10, red).



Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using Aquaporin 4 antibody (16473-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), GFAP antibody (60190-1-Ig, Clone: 4B2E10, red).