## For Research Use Only

## Aquaporin 4 Recombinant antibody

Catalog Number:82296-6-RR



**Basic Information** 

Catalog Number: GenBank Accession Number: 82296-6-RR BC022286

Concentration: GeneID (NCBI):

850 ug/ml 361

Source: UNIPROT ID:
Rabbit P55087
Isotype: Full Name:
IgG Aquaporin 4
Immunogen Catalog Number: Calculated MW:
AG9561 323 aa, 35 kDa

Observed MW: 32-34 kDa

**Applications** 

Tested Applications: WB, IHC, IF-P, ELISA Species Specificity:

human, mouse, rat

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

buffer pH 6.0

Purification Method: Protein A purfication

CloneNo.:

240856C7

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500 IF-P 1:50-1:500

Positive Controls:

WB: 37°C incubated mouse brain tissue,

IHC: rat brain tissue,

IF-P: 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.

Storage

Storage:

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

Storage Buffer

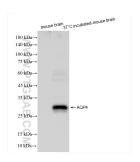
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**



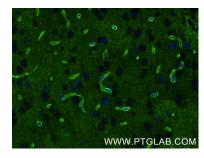
Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 82296-6-RR (Aquaporin 4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



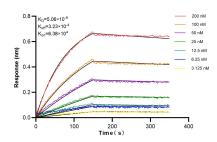
37°C incubated mouse brain tissue were subjected to SDS PAGE followed by western blot with 82296-6-RR (Aquaporin 4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 82296-6-RR (Aquaporin 4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using Aquaporin 4 antibody (82296-6-RR, Clone: 240856C7) at dilution of 1:200 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82296-6-RR against Human Aquaporin 4 were performed. The affinity constant is 5.06 nM.