

Product Name: Aquaporin 4(4H1)Mouse Monoclonal Antibody**Catalog #: AMM07080**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC/IF
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	PBS, pH 7.4, containing 0.5%protective protein, 0.02% New type preservative N as Preservative and 50% Glycerol.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300,ICC/IF 1:100-1:200
Molecular Weight	48kDa

Antigen Information

Gene Name	AQP4
Alternative Names	AQP4; Aquaporin-4; AQP-4; Mercurial-insensitive water channel; MIWC; WCH4
Gene ID	361.0
SwissProt ID	P55087
Immunogen	Synthetic Peptide of Aquaporin 4

Background

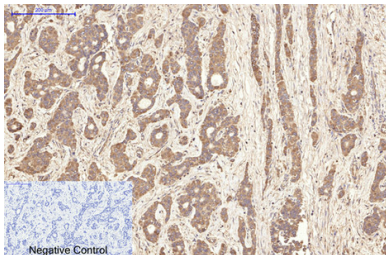
This gene encodes a member of the aquaporin family of intrinsic membrane proteins that function as water-selective channels in the plasma membranes of many cells. This protein is the predominant aquaporin found in brain and has an important role in

brain water homeostasis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Dec 2015],domain:Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA),function:Forms a water-specific channel. Osmoreceptor which regulates body water balance and mediates water flow within the central nervous system.,similarity:Belongs to the MIP/aquaporin (TC 1.A.8) family.,tissue specificity:Brain - muscle >> heart, kidney, lung, and trachea.,

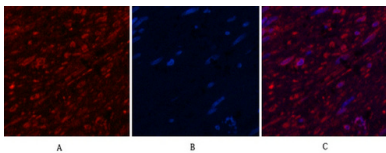
Research Area

Signal Transduction; Metabolism; Plasma Membrane; Channels; Neuroscience; Processes

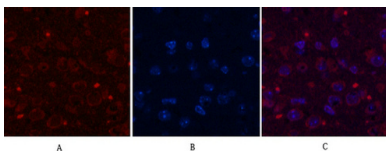
Image Data



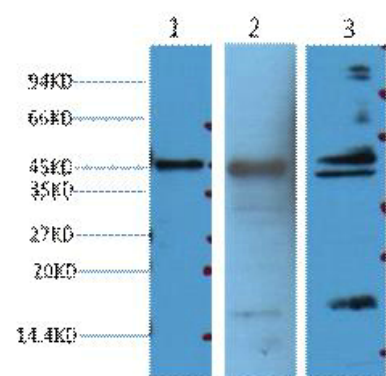
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,Aquaporin 4 Monoclonal Antibody (4H1) was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) . Negative control was used by secondary antibody only.



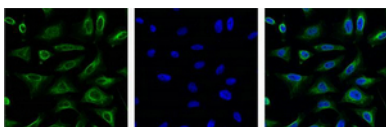
Immunofluorescence analysis of Human-appendix tissue. 1,Aquaporin 4 Monoclonal Antibody (4H1) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Mouse-brain tissue. 1,Aquaporin 4 Monoclonal Antibody (4H1) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) Hela, 2) Mouse Heart tissue, 3) Rat Heart Tissue, diluted at 1:2000.



IF analysis of Hela with antibody (Left) and DAPI (Right) diluted at 1:100.

