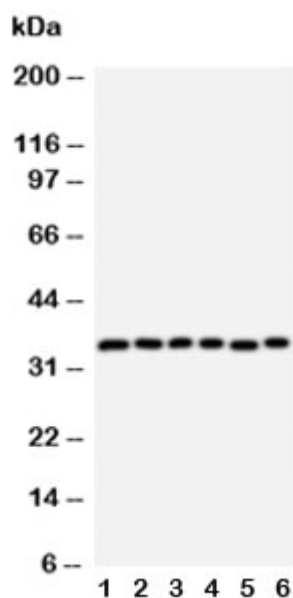


Aquaporin 4 Antibody (R31037)

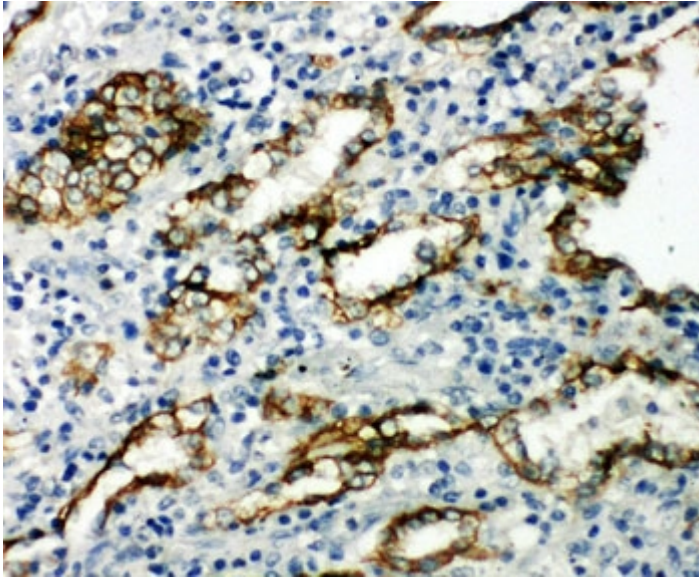
Catalog No.	Formulation	Size
R31037	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

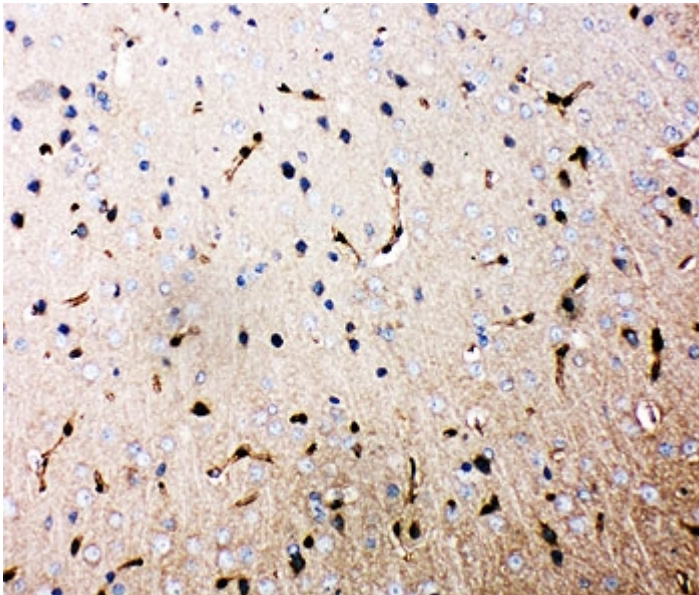
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P55087
Applications	Western blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This Aquaporin 4 antibody is available for research use only.



Western blot testing of Aquaporin 4 antibody and Lane 1: rat heart; 2: rat brain; 3: rat kidney; 4: (h) HT1080; 5: (h) MCF-7; 6: (h) COLO320 cell lysate. Observed molecular weight: 35~45kDa depending on glycosylation level.



IHC-P: Aquaporin 4 antibody testing of human lung cancer tissue. HIER: steamed with pH6 citrate buffer.



IHC-P: Aquaporin 4 antibody testing of rat brain tissue. HIER: steamed with pH6 citrate buffer.

Description

Aquaporin 4, also known as Mercurial-Insensitive Water Channel (MIWC), is protein which in humans is encoded by the AQP4 gene. The aquaporins are a family of water-selective membrane channels found in animals, plants, and microorganisms. AQP4 is the predominant water channel in the brain and has an important role in brain water homeostasis. By fluorescence in situ hybridization, Lu et al.(1996) determined that the AQP4 gene maps to 18q11.2-q12.1. By interspecific backcross analysis, Turtzo et al.(1997) mapped the mouse Aqp4 gene to the proximal region of chromosome 18. Analyzing the expression of AQP4 in mammalian skeletal muscle, Frigeri et al.(1998) found that, in immunohistochemical experiments, affinity-purified AQP4 antibodies stained selectively the sarcolemma of fast-twitch fibers. Immunocytochemistry revealed strong AQP4 water channel expression in Muller cells in mouse retina and in fibrous astrocytes in optic nerve.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Aquaporin 4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 258-27 (FKRRFKEAFSKAAQQTK) were used as the immunogen for this Aquaporin 4 antibody.

Storage

After reconstitution, the Aquaporin 4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.