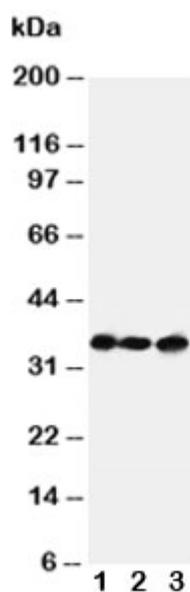


AQP4 Antibody Aquaporin 4 (R30323)

Catalog No.	Formulation	Size
R30323	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
Limitations	This AQP4 antibody is available for research use only.



Western blot testing of AQP4 antibody and Lane 1: rat heart; 2: rat brain; 3: human COLO320 cell lysate. Observed molecular weight: 35~45kDa depending on glycosylation level.

Description

Aquaporin 4 is found in the basolateral cell membrane of principal collecting duct cells and provide a pathway for water to exit these cells. The gene is mapped to 18q11.2-q12.1. Similar to other aquaporins, the AQP4 gene is composed of 4 exons encoding 127, 55, 27, and 92 amino acids separated by introns of 0.8, 0.3, and 5.2 kb. Unlike other aquaporins, an alternative coding initiation sequence (designated exon 0) was located 2.7 kb upstream of exon 1. When spliced together, M1 and the subsequent 10 amino acids are encoded by exon 0; the next 11 amino acids and M23 are encoded by exon 1. The protein is expressed in astrocytes and is upregulated by direct insult to the central nervous system. AQP4 is the predominant water channel in the brain and has an important role in brain water homeostasis. It is abundant in mammalian brain and is concentrated in astrocytic foot processes at the blood-brain barrier.

Application Notes

The stated application concentrations are suggested starting points. Titration of the AQP4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Aquaporin 4 (FTIFASCDKRTDVTGS) was used as the immunogen for this AQP4 antibody.

Storage

After reconstitution, the AQP4 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.