AQP4 Polyclonal Antibody

## BACKGROUND

Aquaporin 4 (AQP4) is a predominant water channel protein in mammalian brains, which is abundantly expressed in astrocytes throughout the central nervous system, particularly at the blood-brain and brain-cerebrospinal fluid barriers. ${ }^{1}$ AQP4 mediates bidirectional transport of water across astrocytes. Phenotype analysis of transgenic mice lacking AQP4 has provided compelling evidence for involvement of AQP4 in cerebral water balance, astrocyte migration and neural signal transduction. ${ }^{2}$ AQP4 manipulation may serve as a novel therapeutic strategy for a variety of cerebral disorders including stroke, tumor, infection, hydrocephalus, epilepsy, and traumatic brain injury. ${ }^{3}$

## References

1. Manley GT et al.: Neuroscience, 129:983-91, 2004.
2. Verkman AS et al.: Biochim Biophys Acta. 1758:1085-93, 2006.
3. Manley GT et al.: Nat Med. 6:159-63, 2000.

## TECHNICAL INFORMATION

## Source:

AQP4 Antibody is a rabbit polyclonal antibody raised against peptide antigen in the middle region of human AQP4.

## Specificity and Sensitivity:

This polyclonal antibody detects endogenous levels of AQP4 proteins in normal primary cell lysates.

Storage Buffer: PBS and $0.01 \%$ sodium azide.

## Storage:

Store at $-20^{\circ} \mathrm{C}$ for at least one year. Store at $4^{\circ} \mathrm{C}$ for frequent use. Avoid repeated freeze-thaw cycles.

## APPLICATIONS

| Application: | *Dilution: |
| :---: | :---: |
| WB | $1: 1000$ |
| IP | $1: 50$ |
| IHC | $1: 100$ |
| ICC | $\mathrm{n} / \mathrm{d}$ |
| FACS | $\mathrm{n} / \mathrm{d}$ |
| *Optimal dilutions must be determined by end user. |  |

## QUALITY CONTROL DATA

Various primary cell lysates were subjected to Western Blot analysis using AQP4 Antibody, including: HUVEC: Human Umbilical Vein Endothelial Cells, HSkMC: Human Skeletal Muscle cells and the HL60 cell line.

