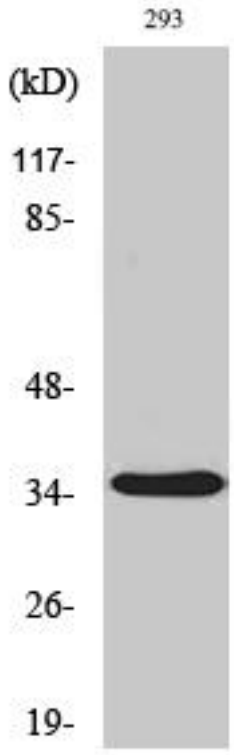
AQP4 Monoclonal Antibody

Catalog No	YP-mAb-16381
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	AQP4
Protein Name	Aquaporin-4
Immunogen	The antiserum was produced against synthesized peptide derived from human AQP4. AA range:204-253
Specificity	AQP4 Monoclonal Antibody detects endogenous levels of AQP4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AQP4; Aquaporin-4; AQP-4; Mercurial-insensitive water channel; MIWC; WCH4
Observed Band	35kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Basolateral cell membrane ; Multi-pass membrane protein . Endosome membrane . Cell membrane, sarcolemma ; Multi-pass membrane protein . Cell projection . Activation of the vasopressin receptor AVPR1A triggers AQP4 phosphorylation at Ser-180 and promotes its internalization from the cell membrane. Detected on brain astrocyte processes and astrocyte endfeet close to capillaries. .
Tissue Specificity	Detected in skeletal muscle (PubMed:29055082). Detected in stomach, along the glandular base region of the fundic gland (at protein level) (PubMed:8601457). Detected in brain, lung and skeletal muscle, and at much lower levels in heart and ovary (PubMed:7559426, PubMed:8601457).
Function	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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using AQP4 Monoclonal Antibody