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Anti-AQP4 Rabbit Monoclonal Antibody

Catalog # ABO15155

Product Information

Application	IHC
Primary Accession	P55087
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-AQP4 Rabbit Monoclonal Antibody . Tested in IHC application. This antibody reacts with Human, Rat.

Additional Information

Gene ID	361
Other Names	Aquaporin-4, AQP-4, Mercurial-insensitive water channel, MIWC, WCH4, AQP4
Calculated MW	34830
Application Details	IHC 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 17A30
Immunogen	A synthesized peptide derived from human AQP4
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	AQP4
Function	Forms a water-specific channel (PubMed: 19383790, PubMed:7559426, PubMed:8601457). Plays an important role in brain water homeostasis (PubMed:37143309). It is involved in glymphatic solute transport and is required for a normal rate of water exchange across the blood brain interface. Required for normal levels of cerebrospinal fluid influx into the brain cortex and parenchyma along paravascular spaces that surround

	penetrating arteries, and for normal drainage of interstitial fluid along paravenous drainage pathways. Thereby, it is required for normal clearance of solutes from the brain interstitial fluid, including soluble beta-amyloid peptides derived from APP. Plays a redundant role in urinary water homeostasis and urinary concentrating ability (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P55088}; Multi-pass membrane protein. Endosome membrane {ECO:0000250|UniProtKB:P47863}. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection {ECO:0000250|UniProtKB:P47863}. Note=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 {ECO:0000250|UniProtKB:P47863}
Tissue Location	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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.