

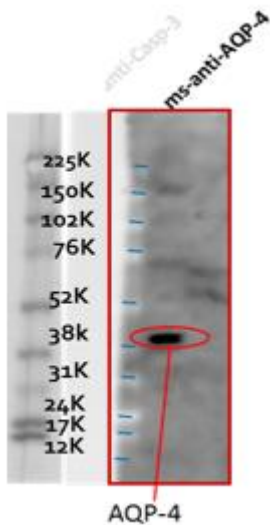
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Aquaporin-4, Human, clone 4H1		
Catalog number	HM2341		
Lot number	-	Expiry date	-
Volume	0.1 ml	Amount	100 µg
Formulation	0.2 µm filtered in PBS+50%glycerol+0.5%BSA+0.02%NaN3	Concentration	1 mg/ml
Host Species	Mouse IgG1	Conjugate	None
Endotoxin	N.A.	Purification	Affinity
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes			•					•
No								
N.D.	•	•		•	•	•	•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



W: A reduced sample treatment and SDS-Page was used. The band size is ~45 kDa.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: A reduced sample treatment and SDS-Page was used. The band size is ~45 kDa.

General Information

Description Monoclonal antibody 4H1 recognizes Aquaporin-4. Aquaporin 4, also known as AQP4, is a protein which in humans is encoded by the AQP4 gene. AQP4 belongs to the aquaporin family of integral membrane proteins that conduct water through the cell membrane. AQP4 is constitutively expressed in the basolateral cell membrane of principal collecting duct cells in the kidney and provide a pathway for water to exit these cells. AQP4 is also expressed in astrocytes and is upregulated by direct insult to the central nervous system. Aquaporin-4 is one of the most abundant molecules in the brain and is particularly prevalent in astrocytic membranes at the blood-

brain and brain-liquor interfaces. While AQP4 has been implicated in a number of pathophysiological processes, its role in brain physiology has remained elusive. Only recently has evidence accumulated to suggest that AQP4 is involved in such diverse functions as regulation of extracellular space volume, potassium buffering, cerebrospinal fluid circulation, interstitial fluid resorption, waste clearance, neuroinflammation, osmosensation, cell migration, and Ca(2+) signaling. AQP4 is also required for normal function of the retina, inner ear, and olfactory system. Aquaporin-4 is the primary autoimmune target in neuromyelitis optica, in which AQP4-specific IgG antibodies target astrocytic AQP4, resulting in complement activation and inflammation.

Immunogen	Synthetic Aquaporin-4 peptide
Aliases	AQP4; Aquaporin-4; AQP-4; Mercurial-insensitive water channel; MIWC; WCH4
Cross reactivity	Mouse: Yes; Rat: Yes.
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Robbert Zwinkels

Date
16/03/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.