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Anti-Aquaporin 9 Antibody

Catalog # ABO11401

Product Information

Application	WB
Primary Accession	Q9JIJ3
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Aquaporin-9(AQP9) detection. Tested with WB in Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	64008
Other Names	Aquaporin-9, AQP-9, Aquaglyceroporin-9, Aqp9
Calculated MW	31764
Application Details	Western blot, 0.1-0.5 □g/ml, Mouse
Subcellular Localization	Membrane ; Multi-pass membrane protein .
Source	Eukaryota
Protein Name	Aquaporin-9
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse Aquaporin 9(263-278aa VLFIQMHHSNPDPEVK).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

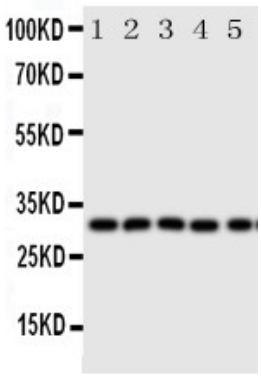
Protein Information

Name	Aqp9 {ECO:0000312|MGI:MGI:1891066}
Function	Aquaglyceroporins form homotetrameric transmembrane channels, with each monomer independently mediating glycerol and water transport across the plasma membrane along their osmotic gradient (PubMed:22081610). AQP9 is the primary route for glycerol uptake in hepatocytes, supporting hepatic gluconeogenesis (PubMed:17360690, PubMed:22081610). It exhibits broad specificity and may transport various small, non-charged solutes, including carbamides, polyols, purines, and pyrimidines (By similarity). AQP9 may also facilitate hepatic urea extrusion (PubMed:22081610, PubMed:23042941). Due to its permeability to lactate, AQP9 might participate in the astrocyte-to- neuron lactate shuttle, supplying neurons with energy (PubMed:32748371). Additionally, AQP9 is permeable to arsenite, contributing to arsenic excretion by the liver and providing partial protection against arsenic toxicity (PubMed:11972053, PubMed:19805235). It is also permeable to H2O2 in vivo (PubMed:26837049). Could also be permeable to ammonium (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q96PS8}. Basolateral cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q96PS8}. Note=Functions at the hepatocyte basolateral membrane.

Background

Aquaporin-9 is a protein that in humans is encoded by the AQP9 gene. AQP9 encodes a 295-amino-acid protein with the amino acid sequence identity with AQP3(48%), AQP7(45%), and other aquaporins(approximately 30%), suggesting that AQP3, AQP7, and AQP9 belong to a subfamily of the aquaporin family. AQP9 is the major glycerol channel in mouse erythrocytes and suggest that this transport pathway may contribute to the virulence of intraerythrocytic stages of malarial infection.

Images



Anti-Aquaporin 9 antibody, ABO11401, Western blottingAll lanes: Anti Aquaporin 9 (ABO11401) at 0.5ug/mlLane 1: Mouse Liver Tissue Lysate at 50ugLane 2: Mouse Lung Tissue Lysate at 50ugLane 3: Mouse Spleen Tissue Lysate at 50ugLane 4: Mouse Testis Tissue Lysate at 50ugLane 5: PC-12 Whole Cell Lysate at 40ugPredicted bind size: 31KDObserved bind size: 31KD

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