

Aquaporin 1 Rabbit mAb

Catalog # AP75096

Product Information

ApplicationWB, IHC-PPrimary AccessionP29972ReactivityHuman, RatHostRabbit

Clonality Monoclonal Antibody

Calculated MW 28526

Additional Information

Gene ID 358

Other Names AQP1

Dilution WB~~1/500-1/1000 IHC-P~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Protein Information

Name AQP1 (HGNC:633)

Function Forms a water channel that facilitates the transport of water across cell

membranes, playing a crucial role in water homeostasis in various tissues (PubMed: 1373524, PubMed: 23219802). Could also be permeable to small solutes including hydrogen peroxide, glycerol and gases such as amonnia (NH3), nitric oxide (NO) and carbon dioxide (CO2) (PubMed: 16682607,

PubMed: 17012249, PubMed: 19273840, PubMed: 33028705,

PubMed:<u>8584435</u>). Recruited to the ankyrin-1 complex, a multiprotein complex of the erythrocyte membrane, it could be part of a CO2 metabolon, linking facilitated diffusion of CO2 across the membrane, anion exchange of Cl(-)/HCO3(-) and interconversion of dissolved CO2 and carbonic acid in the

cytosol (PubMed:<u>17012249</u>, PubMed:<u>35835865</u>). In vitro, it shows

non-selective gated cation channel activity and may be permeable to cations

like K(+) and Na(+) in vivo (PubMed:36949749, PubMed:8703053).

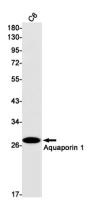
Cellular Location Cell membrane; Multi-pass membrane protein

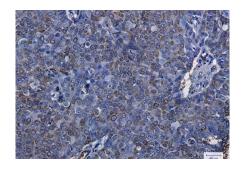
Tissue Location Detected in erythrocytes (at protein level). Expressed in a number of tissues

including erythrocytes, renal tubules, retinal pigment epithelium, heart, lung, skeletal muscle, kidney and pancreas. Weakly expressed in brain, placenta

and liver

Images





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