

Anti-Aquaporin 6 Picoband Antibody

Catalog # ABO10347

Product Information

Application	WB, IHC-P
Primary Accession	Q13520
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Aquaporin-6(AQP6) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	363
Other Names	Aquaporin-6, AQP-6, Aquaporin-2-like, Kidney-specific aquaporin, hKID, AQP6, AQP2L
Calculated MW	29370
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Mouse, Rat, Human
Subcellular Localization	Cytoplasmic vesicle membrane ; Multi-pass membrane protein .
Source	Eukaryota
Protein Name	Aquaporin-6
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Aquaporin 6 (238-271aa DTKTLAQRLAILTGTVGAGAGAEPLKKESQ), different from the related mouse and rat sequences by fourteen amino acids.
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	AQP6 (HGNC:639)
Function	Aquaporins form homotetrameric transmembrane channels, with each monomer independently mediating water transport across the plasma membrane along its osmotic gradient (PubMed: 8812490). Unlike classical aquaporins, AQP6 is an intracellular channel with selective anion permeability, particularly for nitrate, and exhibits very low water permeability (By similarity). It may also facilitate the transport of gases, such as CO ₂ and NH ₄ (+), as demonstrated in vitro (By similarity).
Cellular Location	Cytoplasmic vesicle membrane {ECO:0000250 UniProtKB:Q9WTY0}; Multi-pass membrane protein

Background

Aquaporin 6, kidney specific is a protein in humans that is encoded by the AQP6 gene. The aquaporins (AQPs) are a family of water-transporting proteins that facilitate osmotically driven water movement across cell plasma membranes. Among the seven human aquaporins cloned to date (AQPs 0-6), genes encoding the four most closely related aquaporins (AQP0, AQP2, AQP5, and AQP6) have been mapped to chromosome band 12q13, suggesting an aquaporin family gene cluster at this locus. Unlike other aquaporins, AQP6 functions not as a water channel but as an anion-selective channel. Single-channel analyses have shown AQP6 to flicker rapidly between closed and open status.

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