

Product datasheet for **TA329017**

Aqp5 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DHREERKKTIELTAH corresponding to amino acid residues 251-265 of rat AQP5?Â ?. Intracellular, C-terminus.?Â ?Â
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	aquaporin 5
Database Link:	NP_036911 Entrez Gene 11830 Mouse Entrez Gene 25241 Rat P47864



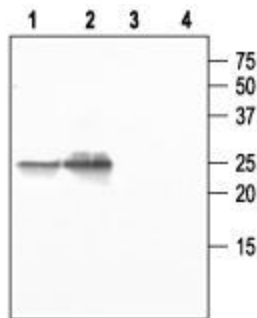
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Background:

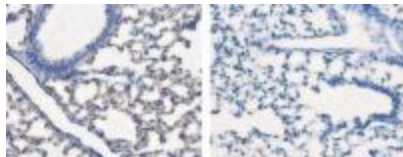
The importance of the Aquaporin water channels was underscored by awarding the 2003 Nobel Prize in Chemistry to Peter Agre “for the discovery of water channels”. Today, eleven mammalian proteins that belong to the Aquaporin family have been identified. The proteins present a conserved structure of six transmembrane domains with intracellular N and C-termini. Aquaporin 5 (AQP5) is expressed in secretory glands, lung and eye, where it works in modulating the rate of fluid release. Since a number of pathological conditions including pulmonary edema, respiratory distress syndrome and congestive heart failure are characterized by disrupted fluid transport, it has been suggested that modulation of the expression of AQP5 could be a novel modality of treatment of the above illnesses. Indeed, several studies have shown that AQP5 expression is downregulated in animal models of acute lung infection.

Synonyms:

AQP-5; Aquaporin-5

Product images:


Western blot analysis of mouse salivary gland (1 and 3) and rat lung (2 and 4): 1, 2. Anti-Aquaporin 5 antibody, (1:200). 3, 4. Anti-Aquaporin 5 antibody, preincubated with the control peptide antigen.



Expression of Aquaporin 5 in rat lung. Immunohistochemical staining of rat lung sections using Anti-Aquaporin 5 antibody, (left panel). The strong staining in the alveoli (red brown) is consistent with type 1 pneumocytes (arrows). Counterstain of cell nuclei appears blue. A negative control is shown in the right panel.