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Product datasheet for TA329020

Aqp8 Rabbit Polyclonal Antibody

Product data:

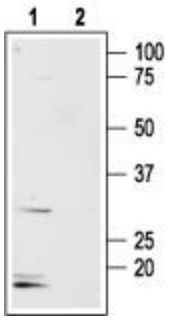
Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)REIKGKETNMADSYH, corresponding to amino acid residues 14-28 of rat AQP-8. Intracellular, N-terminus.
Formulation:	Lyophilized. 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, 0.025% NaN3.
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 8
Database Link:	NP_062031 Entrez Gene 29172 Rat P56405

View online »

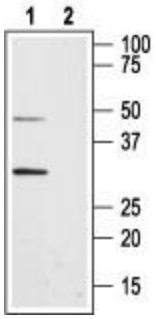
Background: Aquaporin 8 (AQP-8) belongs to a family of membrane proteins that allow passage of water and certain other solutes through biological membranes. The family is composed of 13 members (AQP-0 to AQP-12). Little is known about the function of the two newest members, AQP-11 and AQP-12. The aquaporins can be divided into two functional groups based on their permability characteristics: the aquaporins that are permeated primarily by water and include besides AQP-8, AQP-1, AQP-2, AQP4 and AQP-5, and the aquaglyceroporins that are permeated by water and other small solutes such as glycerol. This last group includes AQP-3, AQP-7, AQP-9 and AQP-10. The proteins present a conserved structure of six transmembrane domains with intracellular N- and C-termini. The functional channel is a tetramer but each subunit has a separate pore and therefore the functional channel unit, contains four pores. AQP-8 is expressed along the gastrointestinal tract including small intestine, colon, pancreas and liver and also in other organs such as testis, lung and kidney. The physiological function of AQP-8 is not entirely clear but studies suggest that it has an important role in colonic water adsorption and hepatocyte bile formation. Interestingly, AQP-8 expression is markedly altered in gastrointestinal disorders such as ulcerative colitis and inflammatory bowel disease.

Synonyms: AQP-8

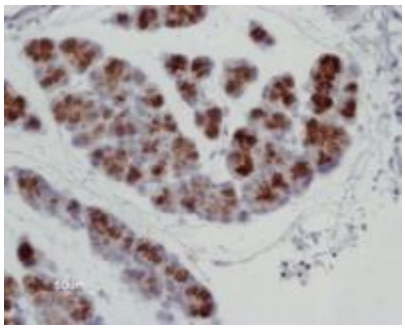
Product images:



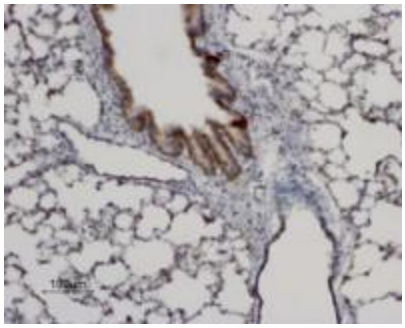
Western blot analysis of rat small intestine membranes: 1. Anti-Aquaporin 8 antibody, (1:200). 2. Anti-Aquaporin 8 antibody, preincubated with the control peptide antigen.



Western blot analysis of rat pancreas membranes: 1. Anti-Aquaporin 8 antibody, (1:400). 2. Anti-Aquaporin 8 antibody, preincubated with the control peptide antigen.



Expression of Aquaporin 8 in rat pancreas. Immunohistochemical staining of rat pancreas paraffin-embedded sections using Anti-Aquaporin 8 antibody, (1:100). Staining (brown color) is specific for the apical portion of acinar cells in the exocrine pancreas. Hematoxilin is used as the counterstain.



Expression of Aquaporin 8 in rat lung. Immunohistochemical staining of rat lung paraffin-embedded sections using Anti-Aquaporin 8 antibody, (1:100). Staining (brown color) is specific for the bronchiolar epithelium. Hematoxilin is used as the counterstain.