

Product datasheet for **TA329015**

Aqp3 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)STEAENVKLAHMKHKEQI, corresponding to amino acid residues 275-292 of rat AQP3. Intracellular, C-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, 1% BSA, 0.05% 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 3
Database Link:	NP_113891 Entrez Gene 360 Human Entrez Gene 11828 Mouse Entrez Gene 65133 Rat P47862



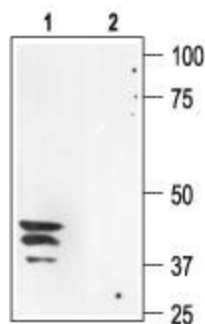
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Background:

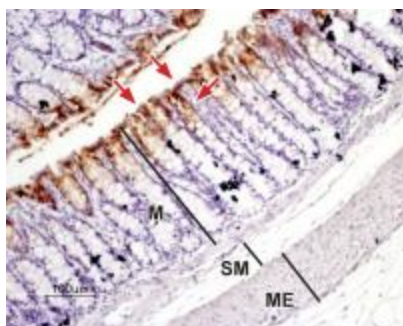
Aquaporin 3 (AQP-3) belongs to a family of membrane proteins that allow passage of water and certain other solutes through biological membranes. The family is composed of 13 members (AQP-0 to AQP-12). The aquaporins can be divided into two functional groups based on their permeability characteristics: the aquaporins that are only permeated by water and the aquaglyceroporins that are permeated by water and other small solutes such as glycerol. This last group includes AQP-3 as well as AQP-7, AQP-9 and AQP-10. Little is known about the function of the two newest members, AQP-11 and AQP-12. 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-3 is widely expressed in several organs with prominent expression found in the skin, colon, lung and kidney. Consistent with a central function of AQP-3 in skin, mice deficient in AQP-3 have reduced skin water content and elasticity compared with wild-type mice, as well as impaired wound healing and epidermal biosynthesis. Furthermore, AQP-3 deficient mice were found to be resistant to skin tumor development suggesting a role for this aquaporin in tumorigenesis.

Synonyms:

AQP-3; GIL

Product images:


Western blot analysis of rat kidney membranes: 1. Anti-Aquaporin 3 antibody, (1:200). 2. Anti-Aquaporin 3 antibody, preincubated with the control peptide antigen.



Expression of Aquaporin 3 in rat colon. Immunohistochemical staining of paraffin embedded longitudinal section of rat colon using Anti-Aquaporin 3 antibody, (brown). Aquaporin 3 is detected in absorptive cells that are present in the luminal epithelium and in the superior third of the intestinal glands (arrows). Hematoxylin is used as the counterstain. mucosa (M), submucosa (SM) and muscularis externa (ME).