Product name:	AQP3 Rabbit Polyclonal Antibody
Cat number:	ABN07071
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human AQP3. AA range:165-214
Reactivity:	Human,Mouse,Rat
Applications:	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes the water channel protein aquaporin 3. Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein, also known as aquaporin 0. Aquaporin 3 is localized at the basal lateral membranes of collecting duct cells in the kidney. In addition to its water channel function, aquaporin 3 has been found to facilitate the transport of nonionic small solutes such as urea and glycerol, but to a smaller degree. It has been suggested that water channels can be functionally heterogeneous and possess water and solute permeation mechanisms. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015],domain:Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).,function:Forms a water-specific channel that provide kidney medullary collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. May function as a water and urea exit mechanism in antidiuresis in collecting duct cells. Also slightly permeable to urea and glycerol. May play an important role in gastrointestinal tract water transport and in glycerol metabolism.,online information:Blood group antigen gene mutation database,polymorphism:AQP3 is responsible for the GIL blood group system. Isoform 2 is detected in GIL-negative individuals that lack functional AQP3.,similarity:Belongs to the MIP/aquaporin (TC 1.A.8) family.,subcellular location:In collecting ducts of kidney.,tissue specificity:Widely expressed in epithelial cells of kidney (collecting ducts) and airways, in keratinocytes, immature dendritic cells and erythrocytes. Isoform 2 is not detectable in erythrocytes at the protein level.,