

AQP3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19289c**Specification**

AQP3 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O92482
Other Accession	P47862 , Q8R2N1 , Q08DE6 , NP_004916.1
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	31544
Antigen Region	163-191

AQP3 Antibody (Center) - Additional Information**Gene ID** 360**Other Names**

Aquaporin-3, AQP-3, Aquaglyceroporin-3, AQP3

Target/Specificity

This AQP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 163-191 amino acids from the Central region of human AQP3.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AQP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AQP3 Antibody (Center) - Protein Information**Name** AQP3**Function** Water channel required to promote glycerol permeability and water transport across cell

membranes (PubMed:[12239222](#), PubMed:[30420639](#)). Acts as a glycerol transporter in skin and plays an important role in regulating SC (stratum corneum) and epidermal glycerol content. Involved in skin hydration, wound healing, and tumorigenesis. Provides kidney medullary collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. Slightly permeable to urea and may function as a water and urea exit mechanism in antidiuresis in collecting duct cells. It may play an important role in gastrointestinal tract water transport and in glycerol metabolism (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P47862}. Basolateral cell membrane {ECO:0000250|UniProtKB:P47862}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P47862}

Tissue Location

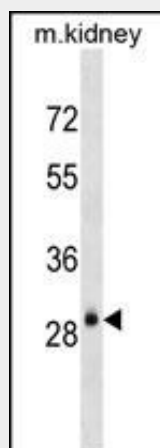
Widely expressed in epithelial cells of kidney (collecting ducts) and airways, in keratinocytes, immature dendritic cells and erythrocytes. Isoform 2 is not detectable in erythrocytes at the protein level

AQP3 Antibody (Center) - Protocols

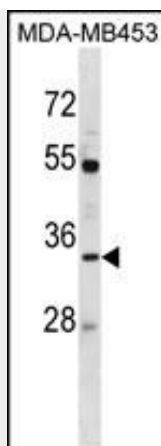
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

AQP3 Antibody (Center) - Images



AQP3 Antibody (Center)(Cat. #AP19289c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the AQP3 antibody detected the AQP3 protein (arrow).



AQP3 Antibody (Center) (Cat. #AP19289c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the AQP3 antibody detected the AQP3 protein (arrow).

AQP3 Antibody (Center) - Background

Aquaporin 3 is a water channel protein. Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). 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.

AQP3 Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Kim, N.H., et al. J. Invest. Dermatol. 130(9):2231-2239(2010)
Ji, C., et al. Int. J. Mol. Med. 26(2):257-263(2010)
Melis, M., et al. Dis. Colon Rectum 53(6):936-943(2010)
Shen, L., et al. Biomed. Pharmacother. 64(5):313-318(2010)