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AQP3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19289c

Specification

AQP3 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q92482
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
E~~Use at an assay dependent concentration.

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 {ECO:0000303|PubMed:7558005, ECO:0000312|HGNC:HGNC:636}

Function Aquaglyceroporins form homotetrameric transmembrane channels, with each monomer independently mediating glycerol and water transport across the plasma membrane along their osmotic gradient (PubMed:12239222, PubMed:30420639). Could also be permeable to urea (By similarity). Also participates in cell permeability to H2O2 and H2O2- mediated signaling (PubMed:20724658). In skin, transports glycerol to the epidermis and stratum corneum, where it maintains hydration, elasticity, and supports lipid biosynthesis for barrier repair (By similarity). In kidney, contributes to the reabsorption of water, helping the body maintain proper fluid balance (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:O14520}. Basolateral cell membrane {ECO:0000250|UniProtKB:P47862}; Multi-pass membrane protein {ECO:0000250|UniProtKB:O14520}

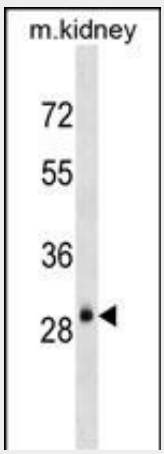
Tissue Location
Widely expressed in epithelial cells of kidney (collecting ducts) and airways, in keratinocytes, immature dendritic cells and erythrocytes. Isoform 2 is not detectable in erythrocytes at the protein level

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 Cytomety
- 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).

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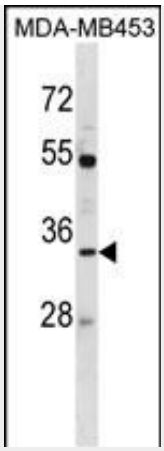

AQP3 Antibody (Center) (Cat. #AP19289c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the AQP3 antibody detected the AQP3 protein (arrow).

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

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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)