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AQP3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP19289c

Specification

AQP3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q92482

AQP3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 360

Other Names
Aquaporin-3, AQP-3, Aquaglyceroporin-3, AQP3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AQP3 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

AQP3 Antibody (Center) Blocking Peptide - Images

AQP3 Antibody (Center) Blocking Peptide - Background

Aquaporin 3 is a water channel protein. Aquaporins are afamily of small integral membrane proteins related to the majorintrinsic protein (MIP or AQP0). Aquaporin 3 is localized at thebasal lateral membranes of collecting duct cells in the kidney. Inaddition to its water channel function, aquaporin 3 has been foundto facilitate the transport of nonionic small solutes such as ureaand glycerol, but to a smaller degree. It has been suggested thatwater channels can be functionally heterogeneous and possess waterand solute permeation mechanisms.

AQP3 Antibody (Center) Blocking Peptide - 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)