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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

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) 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)