

**AQP3 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP19289c****Specification**

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**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](http://www.uniprot.org/citations/12239222), PubMed: [30420639](http://www.uniprot.org/citations/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 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) 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)