

# AQP10 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9576b

## Specification

## AQP10 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q96PS8</u>

## AQP10 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 89872

**Other Names** Aquaporin-10, AQP-10, Aquaglyceroporin-10, Small intestine aquaporin, AQP10

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.

## AQP10 Antibody (C-term) Blocking Peptide - Protein Information

Name AQP10 (HGNC:16029)

#### Function

Aquaglyceroporins form homotetrameric transmembrane channels, with each monomer independently mediating glycerol and water transport across the plasma membrane along their osmotic gradient (PubMed:<a href="http://www.uniprot.org/citations/11573934" target=" blank">11573934</a>, PubMed:<a href="http://www.uniprot.org/citations/12084581" target=" blank">12084581</a>, PubMed:<a href="http://www.uniprot.org/citations/21733844" target=" blank">21733844</a>, PubMed:<a href="http://www.uniprot.org/citations/23382902" target=" blank">23382902</a>, PubMed:<a href="http://www.uniprot.org/citations/30420639" target=" blank">30420639</a>). Could also be permeable to urea (PubMed:<a href="http://www.uniprot.org/citations/12084581" target="\_blank">12084581</a>). Among aquaglyceroporins, it exhibits a unique pH-gated glycerol transport activity, being more active at acidic pH. It most likely plays a central role in the efflux of glycerol formed during triglyceride hydrolysis in adjpocytes and in glycerol uptake by enterocytes, as both processes occur and are stimulated at acidic pH (PubMed:<a href="http://www.uniprot.org/citations/11573934" target=" blank">11573934</a>, PubMed:<a href="http://www.uniprot.org/citations/23382902" target=" blank">23382902</a>, PubMed:<a href="http://www.uniprot.org/citations/30420639" target="\_blank">30420639</a>).

**Cellular Location** 



Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Lipid droplet. Note=Detected around lipid droplets

#### **Tissue Location**

Detected in epithelial cells on villi in the ileum, and also in stomach, jejunum, colon, rectum, white adipose tissue and placenta (at protein level) (PubMed:15221416, PubMed:23382902) Expressed in duodenum and jejunum. Highest expression in absorptive epithelial cells at the tips of villi in the jejunum (PubMed:11573934, PubMed:12084581). Detected in subcutaneous adipose tissue (PubMed:23382902).

## AQP10 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

### AQP10 Antibody (C-term) Blocking Peptide - Images

### AQP10 Antibody (C-term) Blocking Peptide - Background

AQP10 is a member of the aquaglyceroporin family of integral membrane proteins. Members of this family function as water-permeable channels in the epithelia of organs that absorb and excrete water. This protein was shown to function as a water-selective channel, and could also permeate neutral solutes such as glycerol and urea.

### AQP10 Antibody (C-term) Blocking Peptide - References

??hapuis, J., et al. Mol. Psychiatry 14(11):1004-1016(2009)??uke, M.M., et al. Stroke 40(2):363-368(2009)??ohly, H.H., et al. Int J Environ Res Public Health 5(2):115-119(2008)??hiffman, D., et al. Arterioscler. Thromb. Vasc. Biol. 28(1):173-179(2008)??lach, C.F., et al. FEBS Lett. 581(17):3183-3188(2007)