10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

AQP11 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP5805b

Specification

AQP11 Antibody (C-term) Blocking peptide - Product Information

Primary Accession	Q8NBQ7
Other Accession	NP_766627.1

AQP11 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 282679

Other Names
Aquaporin-11, AQP-11, AQP11, AQPX1

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.

AQP11 Antibody (C-term) Blocking peptide - Protein Information

Name AQP11 (HGNC:19940)

Synonyms AQPX1

Function
Channel protein that facilitates the transport of water, glycerol and hydrogen peroxide across membrane of cell or organelles guaranteeing intracellular homeostasis in several organes like liver, kidney and brain (PubMed:24845055, PubMed:24918044, PubMed:31546170). In situation of stress, participates in endoplasmic reticulum (ER) homeostasis by regulating redox homeostasis through the transport of hydrogen peroxide across the endoplasmic reticulum membrane thereby regulating the oxidative stress through the NADPH oxidase 2 pathway (PubMed:31546170). Plays a role by maintaining an environment suitable for translation or protein foldings in the ER lumen namely by participating in the PKD1 glycosylation processing resulting in regulation of PKD1 membrane trafficking thereby preventing the accumulation of unfolding protein in ER (By similarity). Plays a role in the proximal tubule function by regulating its endosomal acidification (By similarity). May play a role in postnatal kidney development (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:F6S3G9}; Multi-pass membrane protein. Note=Localizes mainly to the periphery of lipid droplets (PubMed:24845055). Localizes to cytoplasmic vesicles in maturing spermatozoa (PubMed:28042826). It accumulates partly in mitochondrial-associated endoplasmic reticulum membranes (PubMed:31546170).

Tissue Location
Detected in the sperm head and tail (at protein level) (PubMed:28042826). Expressed in subcutaneous adipocytes (PubMed:24845055). Expressed in testis, kidney and ejaculated spermatozoa (PubMed:19812234).

AQP11 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

AQP11 Antibody (C-term) Blocking peptide - Images

AQP11 Antibody (C-term) Blocking peptide - Background

Aquaporins facilitate the transport of water and small neutral solutes across cell membranes (By similarity).

AQP11 Antibody (C-term) Blocking peptide - References

Gorelick, D.A., et al. BMC Biochem. 7, 14 (2006) :Morishita, Y., et al. Mol. Cell. Biol. 25(17):7770-7779(2005)