

AQP11 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5805b

Specification

AQP11 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, FC,E <u>Q8NBQ7</u> NP_766627.1 Mouse Rabbit Polyclonal Rabbit IgG 244-271

AQP11 Antibody (C-term) - Additional Information

Gene ID 282679

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

Target/Specificity This AQP11 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 244-271 amino acids from the C-terminal region of human AQP11.

Dilution WB~~1:2000 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AQP11 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

AQP11 Antibody (C-term) - Protein Information

Name AQP11 (<u>HGNC:19940</u>)

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:<u>24845055</u>, PubMed:<u>24918044</u>, PubMed:<u>31546170</u>). 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:<u>31546170</u>). 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

Cytoplasmic vesicle membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q8BHH1}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q8BHH1}. Note=Localizes mainly to the periphery of lipid droplets (PubMed:24845055). 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).

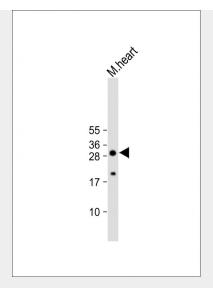
AQP11 Antibody (C-term) - Protocols

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

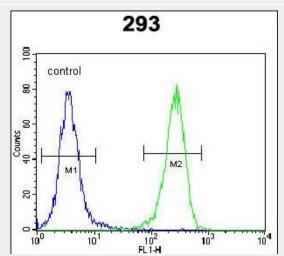
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

AQP11 Antibody (C-term) - Images





Anti-AQP11 Antibody (C-term) at 1:2000 dilution + M. heart whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AQP11 Antibody (C-term) (Cat. #AP5805b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AQP11 Antibody (C-term) - Background

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

AQP11 Antibody (C-term) - References

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