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AQP11 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5805b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8NBQ7
Other Accession	NP_766627.1
Reactivity	Human, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27372
Calculated MW	30203
Antigen Region	244-271

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~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

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).

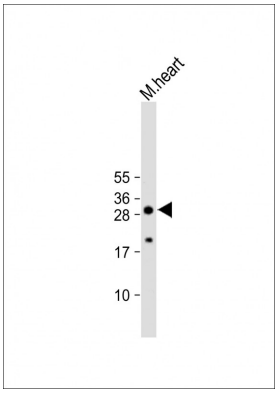
Background

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

References

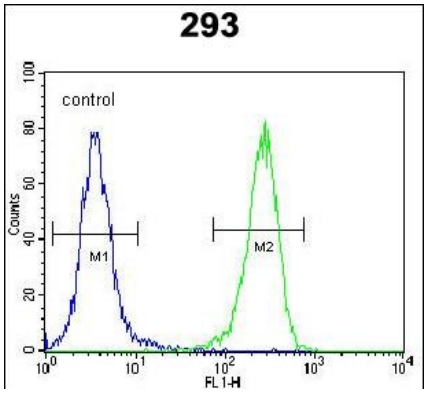
Gorelick, D.A., et al. BMC Biochem. 7, 14 (2006) :
Morishita, Y., et al. Mol. Cell. Biol. 25(17):7770-7779(2005)

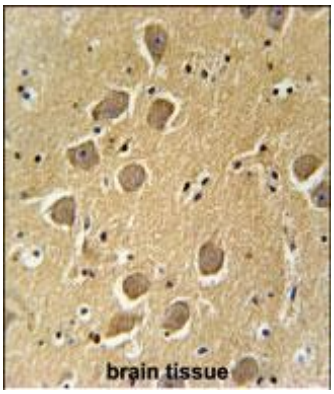
Images



Anti-AQP11 Antibody (C-term) at 1:2000 dilution + M. heart whole cell lysate Lysates/proteins at 20 µg 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) (Cat. #AP5805b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AQP11 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.