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Anti-Aquaporin 5 Antibody

Catalog # AP50992

Product Information

Application	WB, IHC
Primary Accession	P55064
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28292

Additional Information

Gene ID	362
Other Names	Aquaporin-5; AQP-5
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Aquaporin 5. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

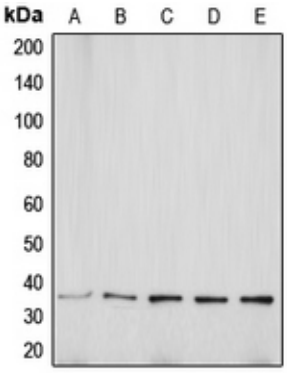
Protein Information

Name	AQP5 (HGNC:638)
Function	Aquaporins form homotetrameric transmembrane channels, with each monomer independently mediating water transport across the plasma membrane along its osmotic gradient (PubMed:18768791, PubMed:8621489). Plays an important role in fluid secretion in salivary glands (By similarity). Required for TRPV4 activation by hypotonicity. Together with TRPV4, controls regulatory volume decrease in salivary epithelial cells (PubMed:16571723). Seems to play a redundant role in water transport in the eye, lung and in sweat glands (By similarity).
Cellular Location	Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein Note=Hypotonicity increases location at the cell membrane Phosphorylation decreases location at the cell membrane
Tissue Location	Detected in skin eccrine sweat glands, at the apical cell membrane and at intercellular canaliculi (at protein level).

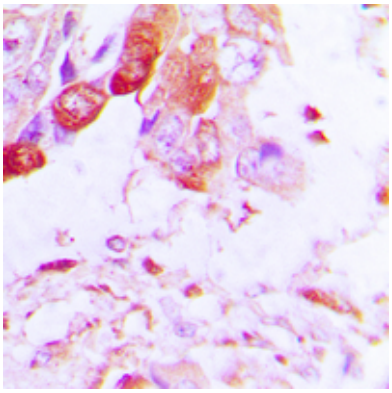
References

Lee M.D.,et al.J. Biol. Chem. 271:8599-8604(1996).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Blaydon D.C.,et al.Am. J. Hum. Genet. 93:330-335(2013).

Images



Western blot analysis of Aquaporin 5 expression in MCF7 (A), Jurkat (B), SP2/0 (C), PC12 (D), KNRK (E) whole cell lysates. (Predicted band size: 28 kD; Observed band size: 35 kD)



Immunohistochemical analysis of Aquaporin 5 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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