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Aquaporin 5 Rabbit pAb

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Catalog # AP52340

Product Information

Application	WB
Primary Accession	Q9WTY4
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28274
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse AQP5
Epitope Specificity	201-265/265
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Aquaporin 5 (AQP5) is a water channel protein. Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). Aquaporin 5 plays a role in the generation of saliva, tears and pulmonary secretions. AQP0, AQP2, AQP5, and AQP6 are closely related and all map to 12q13. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	11830
Other Names	Aquaporin-5, AQP-5, Aqp5 {ECO:0000312|MGI:MGI:106215}
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Aqp5 {ECO:0000312|MGI:MGI:106215}
Function	Aquaporins form homotetrameric transmembrane channels, with each monomer independently mediating water transport across the plasma

	membrane along its osmotic gradient (By similarity). Plays an important role in fluid secretion in salivary glands (PubMed:10400615, PubMed:16571723, PubMed:18027168). 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 (PubMed:10619865, PubMed:12042359, PubMed:18027168).
Cellular Location	Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P55064}. Cell membrane {ECO:0000250|UniProtKB:P55064}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P55064}. Cytoplasmic vesicle membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P55064}. Note=Hypotonicity increases location at the cell membrane. Phosphorylation decreases location at the cell membrane. {ECO:0000250|UniProtKB:P55064}
Tissue Location	Detected at the luminal membrane of secretory epithelial cells in hindpaw sweat glands (PubMed:12042359, PubMed:23473857). Detected in acinar cells in salivary glands, in duct cells in lacrimal glands and in lung (at protein level) (PubMed:10337625, PubMed:10400615, PubMed:10619865, PubMed:16571723, PubMed:18027168). Detected in lung, parotid, submandibular, sublingual, and lacrimal gland tissues (PubMed:10337625)

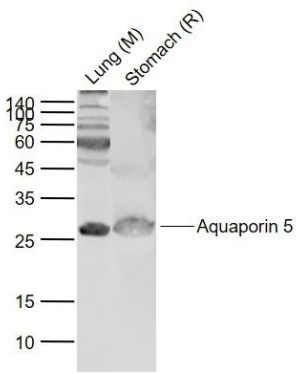
Background

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References

Krane C.M.,et al.Mamm. Genome 10:498-505(1999).
Carninci P.,et al.Science 309:1559-1563(2005).

Images



Sample:
Lane 1: Mouse Lung tissue lysates
Lane 2: Rat Stomach tissue lysates
Primary: Anti-Aquaporin 5 (AP52340) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 29 kD
Observed band size: 27 kD

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