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

AQP5 Polyclonal Antibody

Catalog # AP68476

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P55064
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28292

Additional Information

Gene ID	362
Other Names	AQP5; Aquaporin-5; AQP-5
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

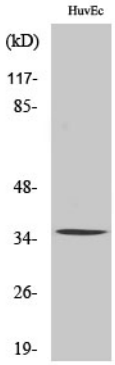
Protein Information

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).

Background

Forms a water-specific channel. Implicated in the generation of saliva, tears, and pulmonary secretions. Required for TRPV4 activation by hypotonicity (PubMed:16571723). Together with TRPV4, controls regulatory volume decrease in salivary epithelial cells (PubMed:16571723).

Images



Western Blot analysis of various cells using AQP5 Polyclonal Antibody