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# AQP5 Antibody

Rabbit mAb
Catalog # AP90597

## Product Information

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|---|---|
| **Application** | WB, IHC, IF, ICC, IHF |
| **Primary Accession** | P55064 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | AQP-5; Aquaporin-5; AQP5; Aquaporin 5; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 28292 |

## Additional Information

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|---|---|
| **Dilution** | WB 1:1000~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human AQP5 |
| **Description** | 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). |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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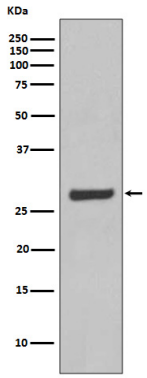
| **Name** | AQP5 ( HGNC:638) |
| **Function** | Aquaporins form homotetrameric transmembrane channels, with each monomer independently mediating water transport across the plasma membrane along its osmotic gradient (PubMed:18768791, PubMed:8621489). Plays an important role in fluid secretion in salivary 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).

## Images




Western blot analysis of AQP5 expression in SW480 cell lysate.

Image not found : 202311/AP90597-IHC.jpg

Immunohistochemical analysis of paraffin-embedded mouse lung, using AQP5 Antibody.