

# Anti-Aquaporin 3 Antibody

Catalog # AP61506

## Product Information

|                   |                                |
|-------------------|--------------------------------|
| Application       | WB, IF/IC                      |
| Primary Accession | <a href="#">Q92482</a>         |
| Reactivity        | Human, Mouse, Rat, Pig, Bovine |
| Host              | Rabbit                         |
| Clonality         | Polyclonal                     |
| Calculated MW     | 31544                          |

## Additional Information

|                    |                                                                                                                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 360                                                                                                                                        |
| Other Names        | Aquaporin-3; AQP-3; Aquaglyceroporin-3                                                                                                     |
| Target/Specificity | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Aquaporin 3. The exact sequence is proprietary. |
| Dilution           | WB~~WB (1/500 - 1/1000) IF/IC~~N/A                                                                                                         |
| 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                                                                                  |

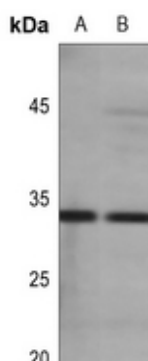
## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | AQP3 {ECO:0000303   PubMed:7558005, ECO:0000312   HGNC:HGNC:636}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Function          | Aquaglyceroporins form homotetrameric transmembrane channels, with each monomer independently mediating glycerol and water transport across the plasma membrane along their osmotic gradient (PubMed: <a href="#">12239222</a> , PubMed: <a href="#">30420639</a> ). Could also be permeable to urea (By similarity). Also participates in cell permeability to H2O2 and H2O2- mediated signaling (PubMed: <a href="#">20724658</a> ). In skin, transports glycerol to the epidermis and stratum corneum, where it maintains hydration, elasticity, and supports lipid biosynthesis for barrier repair (By similarity). In kidney, contributes to the reabsorption of water, helping the body maintain proper fluid balance (By similarity). |
| Cellular Location | Cell membrane; Multi-pass membrane protein {ECO:0000250   UniProtKB:O14520}. Basolateral cell membrane {ECO:0000250   UniProtKB:P47862}; Multi-pass membrane protein {ECO:0000250   UniProtKB:O14520}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

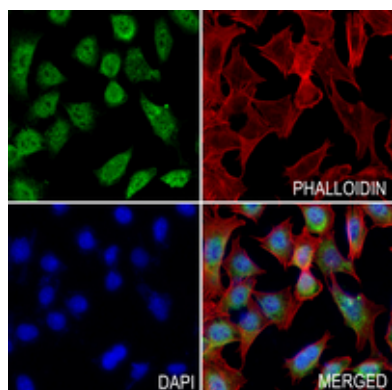
## Tissue Location

Widely expressed in epithelial cells of kidney (collecting ducts) and airways, in keratinocytes, immature dendritic cells and erythrocytes. Isoform 2 is not detectable in erythrocytes at the protein level

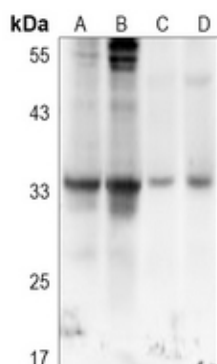
## Images



Western blot analysis of Aquaporin 3 expression in mouse kidney (A), rat kidney (B) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 32 kD)



Immunofluorescent analysis of Aquaporin 3 staining in MOVAS cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Western blot analysis of Aquaporin 3 expression in HEK293T (A), Myla2059 (B), mouse spleen (C), rat lung (D) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 32 kD)

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