

• Rabbit Anti-AQP3 Polyclonal Antibody

Primary Antibodies

Background:

Water is a critical component of all living cells. Interestingly, tissue membranes show a great degree of water permeability. Mammalian red cells, renal proximal tubules, and descending thin limb of Henle are extraordinarily permeable to water. Water crosses hydrophobic plasma membranes either by simple diffusion or through a facilitative transport mechanism mediated by special protein "aquaporin". Over the last decade, genes for several members of aquaporin family have been cloned, expressed, and their distribution studied in many tissues. AQP0 or MIP26 (major intrinsic protein 26kD), and Aquaporin-1 (AQP1, purified from red cells) also called CHIP-28 (channel forming integral protein, 28kD; 268aa; gene locus 7p14) has been the foundation of the growing family of aquaporin. The lens specific AQP0 represents up to 80% of total lens membrane protein. Defects in MIP26 are cause of autosomal dominant cataract. The cataract Fraser mutation (CAT-FR or Shriveled) is a transposon-induced splicing error that substitutes a long terminal repeat sequence for the c-terminus of MIP. The lens opacity mutation (LOP) is an amino acid substitution that inhibits targeting of MIP to the cell membrane.

AQP3 (GLIP, Glycerol-transporting integral protein; 285aa; 31.4kD) has a wide tissue distribution. AQP3 may function as a water and urea exit mechanism in antidiuresis in collecting duct cells. It is also slightly permeable to urea and glycerol. AQP3 may play an important role in gastrointestinal tract water transport and in glycerol metabolism. In the kidney it is predominantly expressed in the inner medulla. AQP families of proteins are predicted to contain six transmembrane domains. The N and C-terminus are predicted to be cytoplasmic.

Source/Purification:

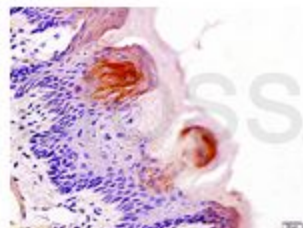
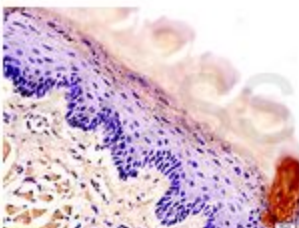
KLH conjugated synthetic peptide derived from human AQP3 C-terminus. Was purified by Protein A and peptide affinity chromatography.

Storage: Prepared as lyophilized powder or liquid and shipped on ice. Store at -20°C for one year.

Reconstitution:

If the antibody is in liquid form, no reconstitution needed.

Reconstitution is only required for the lyophilized antibody. Please refer to the reconstitution instruction card in the package.



Size: 100ul or 100ug lyophilized

Concentration: 1ug/ul

Host: Rabbit

Reactivities: Human, Mouse, Rat,

Application:

- WB(1:100-500)
 - ELISA(1:500-1000)
 - IP(1:20-100)
 - IHC-P(1:100-500)
 - IHC-F(1:100-500)
 - IF(1:100-500)
 - Not yet tested in other applications.
- Optimal working dilutions must be determined by the end user.

Antibody Type: Polyclonal

Isotype: IgG

Molecular Weight: 32kDa

Preservatives:

10ug/uL BSA and 0.1% NaN₃.

For research use only. CAUTION: Not for human or animal therapeutic or diagnostic use.