**BACKGROUND**

Aquaporins (AQPs) are a large family of integral membrane water transport channel proteins that facilitate the transport of water through the cell membrane. This function is conserved in animals, plants and bacteria. Many isoforms of aquaporin have been identified in mammals, designated AQP0 through AQP10. Aquaporins are widely distributed and it is not uncommon for more than one type of AQP to be present in the same cell. Although most aquaporins are only permeable to water, AQP3, AQP7, AQP9 and one of the two AQP10 transcripts are also permeable to urea and glycerol. AQP2 is the only water channel that is activated by vasopressin to enhance water reabsorption in the kidney collecting duct. Aquaporins are involved in renal water absorption, generation of pulmonary secretions, lacrimation, and the secretion and reabsorption of cerebrospinal fluid and aqueous humor. AQP3 is expressed in the basolateral membrane by collecting ducts in the kidney.

**CHROMOSOMAL LOCATION**

Genetic locus: AQP3 (human) mapping to 9p13.3; Aqp3 (mouse) mapping to 4 A5.

**SOURCE**

AQP3 (F-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 268-292 at the C-terminus of AQP3 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. AQP3 (F-1) is available conjugated to agarose (sc-518001 AC), 500 µg/0.25 ml, for IP; to HRP (sc-518001 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518001 PE), fluorescein (sc-518001 FITC), Alexa Fluor® 488 (sc-518001 AF488), Alexa Fluor® 546 (sc-518001 AF546), Alexa Fluor® 594 (sc-518001 AF594) or Alexa Fluor® 647 (sc-518001 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518001 AF680) or Alexa Fluor® 790 (sc-518001 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

AQP3 (F-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 268-292 at the C-terminus of AQP3 of human origin.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.