

Product datasheet for **AP20566PU-S**

Aquaporin 4 (AQP4) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 220-270 of Human AQP4.
Specificity:	This antibody detects endogenous levels of AQP4 protein. (region surrounding Pro253)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 35 kDa
Gene Name:	aquaporin 4
Database Link:	<u>Entrez Gene 11829 Mouse</u> <u>Entrez Gene 25293 Rat</u> <u>Entrez Gene 361 Human P55087</u>



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Background:

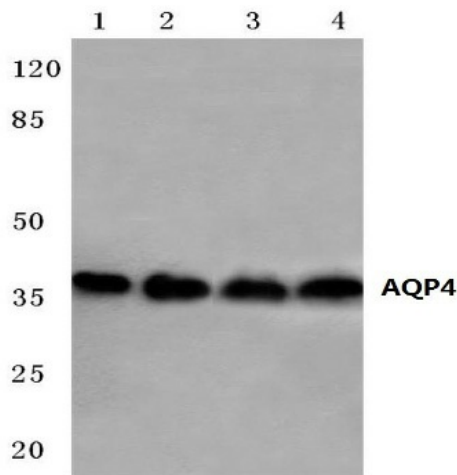
In skeletal muscle, AQP4 (aquaporin 4 also known as mercurial insensitive water channel), localizes to the sarcolemma of fast-twitch muscle fibers. Aquaporins (AQPs) are a large family of integral membrane water transport channel proteins that facilitate the transport of water through the cell membrane. 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.

Synonyms:

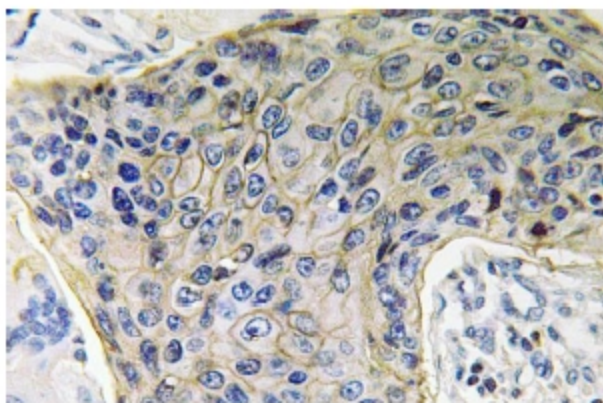
AQP-4, WCH4, MIWC

Protein Families:

Druggable Genome, Transmembrane

Product images:

Western blot analysis of AQP4 Antibody at 1/500 dilution. Lane 1: HeLa whole cell lysate. Lane 2: Jurkat whole cell lysate. Lane 3: PC12 whole cell lysate. Lane 4: sp2/0 whole cell lysate.



Immunohistochemistry analysis of AQP4 Antibody in Paraffin-Embedded Human lung carcinoma tissue.