

AQP4 Polyclonal Antibody

Catalog No: YT0292

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: AQP4

Fields: >>Vasopressin-regulated water reabsorption;>>Bile secretion

Gene Name: AQP4

Protein Name: Aquaporin-4

P55087

P55088

Human Gene Id: 361

Human Swiss Prot

Idiliali Swiss Flot

No:

Mouse Gene Id: 11829

Mouse Swiss Prot

No:

Rat Gene ld: 25293

Rat Swiss Prot No: P47863

Immunogen: The antiserum was produced against synthesized peptide derived from human

AQP4. AA range:204-253

Specificity: AQP4 Polyclonal Antibody detects endogenous levels of AQP4 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:**

Observed Band: 35kD

Background: This gene encodes a member of the aquaporin family of intrinsic membrane

> proteins that function as water-selective channels in the plasma membranes of many cells. This protein is the predominant aquaporin found in brain and has an important role in brain water homeostasis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene and expression of an additional C-terminally extended isoform via the use of an alternative in-frame

translation termination codon. [provided by RefSeg, Dec 2015],

Function: domain: Aquaporins contain two tandem repeats each containing three

> membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA)..function:Forms a water-specific channel. Osmoreceptor which regulates body water balance and mediates water flow within the central nervous system., similarity: Belongs to the MIP/aquaporin (TC 1.A.8) family., tissue

specificity:Brain - muscle >> heart, kidney, lung, and trachea.,

Subcellular Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Location:

Multi-pass membrane protein. Endosome membrane. Cell membrane.

sarcolemma; Multi-pass membrane protein. Cell projection. Activation of the vasopressin receptor AVPR1A triggers AQP4 phosphorylation at Ser-180 and promotes its internalization from the cell membrane. Detected on brain astrocyte

processes and astrocyte endfeet close to capillaries. .

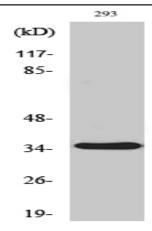
Detected in skeletal muscle (PubMed:29055082). Detected in stomach, along **Expression:**

the glandular base region of the fundic gland (at protein level)

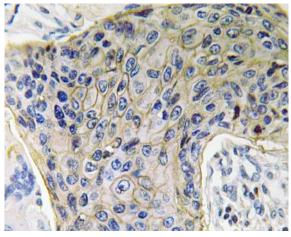
(PubMed:8601457). Detected in brain, lung and skeletal muscle, and at much

lower levels in heart and ovary (PubMed:7559426, PubMed:8601457).

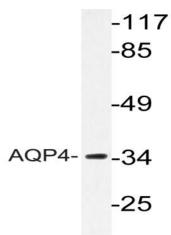
Products Images



Western Blot analysis of various cells using AQP4 Polyclonal Antibody



Immunohistochemistry analysis of AQP4 antibody in paraffinembedded human lung carcinoma tissue.



Western blot analysis of lysate from 293 cells, using AQP4 antibody.