ALPHA DIAGNOSTIC INTERNATIONAL

PRODUCT SPECIFICATION SHEET

Aquaporin-11 (AQP11) antibodies

Cat # AQP115-P	Mouse/Human AQP11 control/blocking peptide	**SIZE**: 100 ug
Cat # AQP115-S	Rabbit Anti-mouse/Human AQP11 antiserum	**SIZE**: 100 ul
Cat # AQP115-A	Rabbit Anti-mouse/human AQP11 IgG (**aff pure**)	**SIZE**: 100 ug

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**". A new member of AQP family, **AQP11**, has been cloned (1). **AQP11** (human, rat, mouse : 271 aa each).

Source of Antigen and Antibodies

Antigen	Two peptides from Mouse AQP11 **(Protein Accession # Q8BHH1 and human AQP11 ref. 1)**; the mixture is designated as AQP115-P control/blocking peptide conjugated to KLH and injected as a mixture; epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # AQP115-A), purified over antigen-Agarose
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as –ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified, undiluted)
100 ul/vial solution lyophilized powder
contains 0.05% sodium azide
Reconstitute powder in 100 ul PBS.

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

We recommend the use of 0.5-1% milk in all primary/secondary antibody-enzyme conjugate incubations in order to suppress non-specific bands.

Western Blotting 1:1K-5K for neat serum and 1-10 ug/ml for affinity pure antibody using ECL.

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:10-50K for neat serum and 0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: not tested. we recommend the use of affinity purified IgG at 2-10 ug/ml in paraformaldehyde fixed sections of tissues.

Specificity & Cross-reactivity

Mouse and human AQP115-P peptide are 84% conserved with each other. AQP115-P peptides has no homology to any other known eukaryotic protein sequences. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References: 1) Ishibashi, K., M. et al. (2000). p. 123-126. In S. Hohmann and S. Nielsen (ed.), Molecular biology and physiology of water and solute transport. Kluwer Academic/Plenum Publishers, New York, N.Y.

(2) Citations of ADI's Antibodies (see web site for updated list)

Butler TL 2006 Am J Physiol Heart Circ Physiol, Aug 2006; 291: H705 - H713. WB IHC mouse and rat heart and tissues im AQP1 knock-out mice

Rentsch RL 2006 J Appl Physiol, 101, 164-168 WB human erythrocytes

**This product is for In vitro research use only.*

Related material available from ADI

Antibodies for AQP1-12 rUT2), VMAT1, VMAT2, Vasopressin receptor (AVPR-V1 and V2)

AQP115-A AQP115-P 70207A

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