ALPHA DIAGNOSTIC INTERNATIONAL

PRODUCT SPECIFICATION SHEET

Aquaporin 12 (AQP12) antibodies

Cat # AQP125-P	Mouse AQP12 control/blocking peptide	**SIZE**: 100 ug
Cat # AQP125-A	Rabbit Anti-Mouse AQP12 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**".
AQP12 (mouse 290 aa; human 295 aa).

SUBCELLULAR LOCATION: Membrane; Multi-pass membrane protein (Potential).
TISSUE SPECIFICITY: Restricted to pancreatic acinar cells.
SIMILARITY: Belongs to the MIP/aquaporin (TC 1.A.8) family. AQP11/AQP12 subfamily.
Protein name Aquaporin-12A , Aqp12
Synonym AQP-12
Gene name Aqp12a

Source of Antigen and Antibodies

Antigen	18-aa peptide of Mouse AQP12 **(Protein Accession # Q8CHJ2; ref 1)**; designated as AQP125-P control/blocking peptide conjugated to KLH; epitope location ~ C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # AQP125-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

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 AQP125-P peptide sequence 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: www.4adi.com\data\abblock.html).

General References: 1) Itoh T, et al (2005) BBRC 330(4), 832-838.

**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)

Western blot Recycling kit (probe same blot with multiple antibodies)

AQP125-A-P 70910A

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