

Product Information Sheet

Polyclonal Anti-Aquaporin1, **AQP1**

Catalogue No. PA1010

Lot No. 03A01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunocytochemistry

Manufactured by

Boster Biological Technology

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Immunogen

A synthetic peptide corresponding to a sequence mapping near the C-terminal of human AQP1, identical to the related mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2µg/ml with the appropriate system to detect AQP1 in cells and tissues.

Immunohistochemistry(P)

At 0.5-1µg/ml to detect AQP1 in formalin fixed and paraffin embedded tissues.

Immunocytochemistry

Suitable

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

Relative detection systems

Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IH(P) and IC.

BACKGROUND

Aquaporin 1 is a 28-kD integral protein thought at first to be a breakdown product of the Rh polypeptide but was later shown to be a unique molecule that is abundant in erythrocytes and renal tubules. AQP1 is also expressed by the choroid plexus and various other tissues. It forms a water-specific channel that provides the plasma membranes of red cells and kidney proximal tubules with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.

REFERENCE

1. Denker, B. M.; Smith, B. L.; Kuhajda, F. P.; Agre, P. : Identification, purification, and partial characterization of a novel M(r) 28,000 integral membrane protein from erythrocytes and renal tubules. *J. Biol. Chem.* 263: 15634-15642, 1988.
2. Thiagarajah, J. R.; Verkman, A. S. : Aquaporin deletion in mice reduces corneal water permeability and delays restoration of transparency after swelling. *J. Biol. Chem.* 277: 19139-19144, 2002.