

PRODUCT DATA SHEET

Bioworld Technology,Inc.

ATP1A1 polyclonal antibody

Catalog: BS67573 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

The Na,K-ATPase is an integral membrane heterodimer belonging to the P-type ATPase family. This ion channel uses the energy derived from ATP hydrolysis to maintain membrane potential by driving sodium export and potassium import across the plasma membrane against their electrochemical gradients. It is composed of a catalytic α subunit and a β subunit . Several phosphorylation sites have been identified for the all subunit. Tyr10 is phosphorylated by an as yet undetermined kinase, Ser16 and Ser23 are phosphorylated by PKC, and Ser943 is phosphorylated by PKA. All of these sites have been implicated in the regulation of enzyme activity in response to hormones and neurotransmitters, altering trafficking and kinetic properties of Na,K-ATPase. Altered phosphorylation in response to angiotensin II stimulates activity in the rat proximal tubule . Na,K-ATPase is also involved in other signal transduction pathways. Insulin regulates its localization in differentiated primary human skeletal muscle cells, and this regulation is dependent on ERK1/2 phosphorylation of the α subunit . Na,K-ATPase and Src form a signaling receptor complex that affects regulation of Src kinase activity and, subsequently, its downstream effectors.

Product:

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 112 kDa

Swiss-Prot:

P05023; P50993; P13637; Q13733

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000)

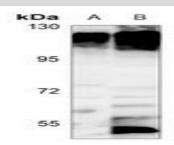
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of ATP1A1 protein.

DATA:



Western blot analysis of ATP1A1 expression in mouse kidney (A), rat kidney (B) whole cell lysates.

Note:

For research use only, not for use in diagnostic procedure.

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