

Basic Information

Product Name	Anti-ATP1A1 Antibody
Gene Name	ATP1A1
Source	Rabbit
Isotype	IgG
Species Reactivity	human,mouse,rat,monkey
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ATP1A1 (7-34aa RDKYEPAAVSEQDKKGGKGGKDRDMDE), different from the related mouse sequence by three amino acids, and from the related rat sequence by four amino acids.
Purification	Immunogen affinity purified.
Observed MW	100-113KD
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺-ATPases. Na⁺/K⁺-ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺-ATPase is encoded by multiple genes. This gene encodes an alpha 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene.

Selected Validation Data

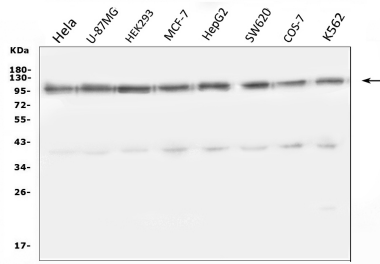


Figure 1. Western blot analysis of anti- ATP1A1 antibody (PB0504).The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human HELA whole cell lysates,Lane 2: human U87-MG whole cell lysates,Lane 3: human HEK293 whole cell lysates,Lane 4: human MCF-7 whole cell lysates,Lane 5: human HEPG2 whole cell lysates,Lane 6: human SW620 whole cell lysates,Lane 7: monkey COS-7 whole cell lysates,Lane 8: human K562 whole cell lysates.Use rabbit anti-ATP1A1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ATP1A1 at approximately 100-113KD. The expected band size for ATP1A1 at 113KD.