



## Rabbit Anti-ATP1A1 antibody

SL4255R

<b>Product Name:</b>	ATP1A1
<b>Chinese Name:</b>	钠钾ATP酶蛋白a1抗体
<b>Alias:</b>	alpha 1 Sodium Potassium ATPase; A1A1; AT1A1; AT1A1_HUMAN; Atpa-1; ATPase Na <sup>+</sup> /K <sup>+</sup> transporting alpha 1 polypeptide; ATPase Na <sup>+</sup> /K <sup>+</sup> transporting subunit alpha 1; BC010319; EC 3.6.3.9; MGC3285; MGC38419; MGC51750; Na K ATPase alpha A catalytic polypeptide; Na K ATPase catalytic subunit alpha A protein; Na(+)/K(+) ATPase 1; Na(+)/K(+) ATPase alpha-1 subunit; Na <sup>+</sup> , K <sup>+</sup> ATPase alpha subunit; Na <sup>+</sup> /K <sup>+</sup> ATPase alpha 1 subunit; Na <sup>+</sup> /K <sup>+</sup> ATPase 1; Na,K ATPase alpha 1 subunit; Nkaa1b; Sodium potassium ATPase alpha 1 polypeptide; Sodium pump 1; Sodium pump subunit alpha-1; sodium-potassium ATPase catalytic subunit alpha-1; Sodium/potassium-transporting ATPase subunit alpha-1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Pig,Rabbit,Guinea Pig,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	113kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ATP1A1:901-1023/1023<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**PubMed:**

[PubMed](#)

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup>-ATPases. Na<sup>+</sup>/K<sup>+</sup>-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<sup>+</sup>/K<sup>+</sup>-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. [provided by RefSeq, May2009].

**Function:**

This is the non-catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of Na(+) and K(+) ions across the plasma membrane. The beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane.

**Subunit:**

Interacts with SIK1. Composed of three subunits: alpha (catalytic), beta and gamma. Binds the HLA class II histocompatibility antigen, DR1.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Melanosome.

**Tissue Specificity:**

Found in most tissues.

**Post-translational modifications:**

Phosphorylation on Tyr-10 modulates pumping activity. Dephosphorylation by protein phosphatase 2A (PP2A) following increases in intracellular sodium, leading to increase catalytic activity.

**Similarity:**

Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIC subfamily.

**SWISS:**

P05023

**Gene ID:**

476

**Database links:**

[Entrez Gene: 476](#) Human

**Product Detail:**

[Entrez Gene: 11928](#) Mouse

[Entrez Gene: 24211](#) Rat

[Omin: 182310](#) Human

[SwissProt: P05023](#) Human

[SwissProt: Q8VDN2](#) Mouse

[SwissProt: P06685](#) Rat

[Unigene: 371889](#) Human

[Unigene: 280103](#) Mouse

[Unigene: 217534](#) Rat

[Unigene: 2992](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

钠钾ATP酶是位于The cell membrane上的一种glycoprotein,与ATP的分解和细胞内外钠、钾离子的转运密切相关,哺乳动物各种组织细胞的钠钾ATP酶的immunology特性基本相同。