

Rabbit Anti-Phospho-ATP1A1 (Ser16) antibody

SL3035R

Product Name:	Phospho-ATP1A1 (Ser16)
Chinese Name:	磷酸化钠钾ATP酶蛋白a1抗体
Alias:	alpha 1 Sodium Potassium ATPase (phospho S16); alpha 1 Sodium Potassium ATPase; A1A1; AT1A1_HUMAN; Atpa-1; ATPase Na+/K+ transporting alpha 1 polypeptide; ATPase Na+/K+ 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+, K+ ATPase alpha subunit; Na+/K+ ATPase alpha 1 subunit; Na+/K+ 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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Sheep, Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	110kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ATP1A1 around the phosphorylation site of Ser16:AV(p-S)E
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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+/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. [provided by RefSeq, May2009].

Function:

This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients.

Subunit:

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

Product Detail:

Subcellular Location:

Cell membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

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

Entrez Gene: 11928 Mouse

Entrez Gene: 24211 Rat

Omim: 182310 Human

SwissProt: P05023 Human

SwissProt: Q8VDN2 Mouse

SwissProt: P06685 Rat

Unigene: 371889 Human

Unigene: 280103 Mouse

Unigene: 217534 Rat

Unigene: 2992 Rat

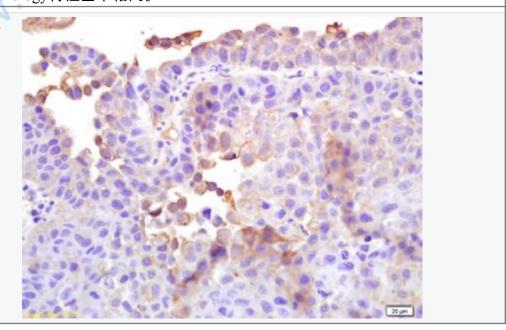
Important Note:

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

Channel protein (Channel Protein)

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。

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Picture:

Tissue/cell: human bladder carcinoma; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Phospho-ATP1A1(Ser16) Polyclonal Antibody,

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Unconjugated(SL3035R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining