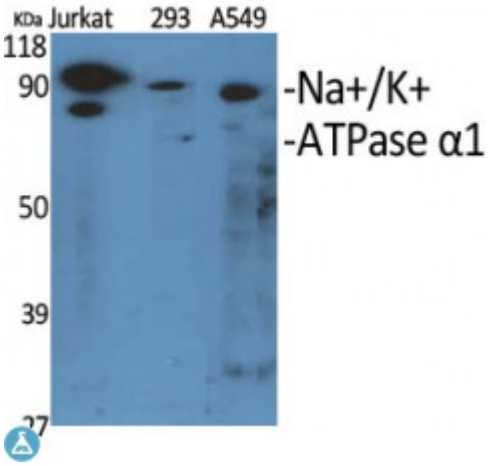
Anti-Na+/K+-ATPase alpha antibody



Description	Rabbit polyclonal to Na+/K+-ATPase alpha1.

Model	STJ94338
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Na+/K+-ATPase alpha1 around the non-phosphorylation site of S16.
Immunogen Region	1-80 aa
Gene ID	476
Gene Symbol	ATP1A1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	Na+/K+-ATPase alpha1 Polyclonal Antibody detects endogenous levels of Na+/K+-ATPase alpha1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Sodium/potassium-transporting ATPase subunit alpha-1 Na +/K + ATPase alpha-1 subunit Sodium pump subunit alpha-1
Molecular Weight	112 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:799OMIM:182310
Alternative Names	Sodium/potassium-transporting ATPase subunit alpha-1 Na +/K + ATPase alpha-1 subunit Sodium pump subunit alpha-1
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.
Cellular Localization	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. Phosphorylation of Ser-943 by PKA modulates the response of ATP1A1 to PKC. Dephosphorylation by protein phosphatase 2A (PP2A) following increases in intracellular sodium, leading to increase catalytic activity .