

Na⁺/K⁺-ATPase α 1 (phospho Ser23) rabbit pAb**Cat#: orb767263 (Manual)**

For research use only. Not intended for diagnostic use.

Product Name	Na ⁺ /K ⁺ -ATPase α 1 (phospho Ser23) rabbit pAb
Host species	Rabbit
Applications	WB;IF;ELISA
Species Cross-Reactivity	Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. IF: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from rat ATP1 alpha1/Na ⁺ /K ⁺ ATPase I around the phosphorylation site of Ser23. AA range: 15-64
Specificity	Phospho-Na ⁺ /K ⁺ -ATPase α 1 (S23) Polyclonal Antibody detects endogenous levels of Na ⁺ /K ⁺ -ATPase α 1 protein only when phosphorylated at S23.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Sodium/potassium-transporting ATPase subunit alpha-1
Gene Name	ATP1A1
Cellular localization	
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal

Concentration 1 mg/ml

Observed band 113kD

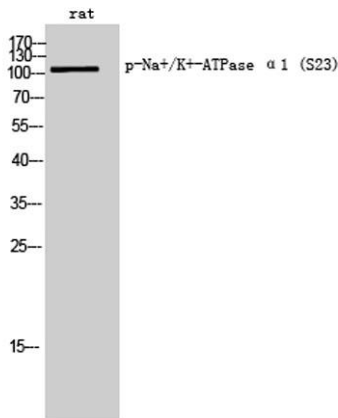
Human Gene ID

Human Swiss-Prot Number

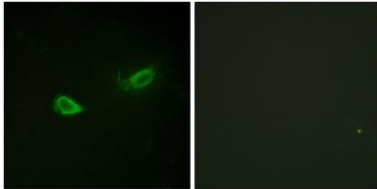
Alternative Names ATP1A1; Sodium/potassium-transporting ATPase subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit; Sodium pump subunit alpha-1

Background

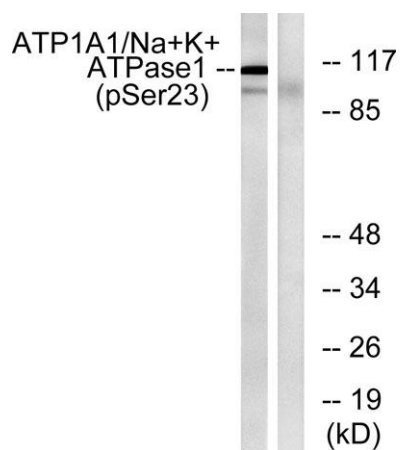
The ATPase Na⁺/K⁺ transporting subunit alpha 1 encoded by ATP1A1 belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺ -ATPases. Na⁺/K⁺ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions 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.



Western Blot analysis of rat cells using Phospho-Na⁺/K⁺-ATPase α1 (S23) Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using ATP1 alpha1/Na+K+ ATPase1 (Phospho-Ser23) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from rat brain, using ATP1 alpha1/Na+K+ ATPase1 (Phospho-Ser23) Antibody. The lane on the right is blocked with the phospho peptide.