



Na⁺/K⁺-ATPase α1 (phospho Ser23) Polyclonal Antibody

Catalog No	YP-Ab-16336
Isotype	IgG
Reactivity	Rat
Applications	WB;IF;ELISA
Gene Name	ATP1A1
Protein Name	Sodium/potassium-transporting ATPase subunit alpha-1
Immunogen	The antiserum was produced against synthesized peptide derived from rat ATP1 alpha1/Na ⁺ /K ⁺ ATPase1 around the phosphorylation site of Ser23. AA range:15-64
Specificity	Phospho-Na ⁺ /K ⁺ -ATPase α1 (S23) Polyclonal Antibody detects endogenous levels of Na ⁺ /K ⁺ -ATPase α1 protein only when phosphorylated at S23.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. IF: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP1A1; Sodium/potassium-transporting ATPase subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit; Sodium pump subunit alpha-1
Observed Band	113kD
Cell Pathway	
Tissue Specificity	
Function	
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.

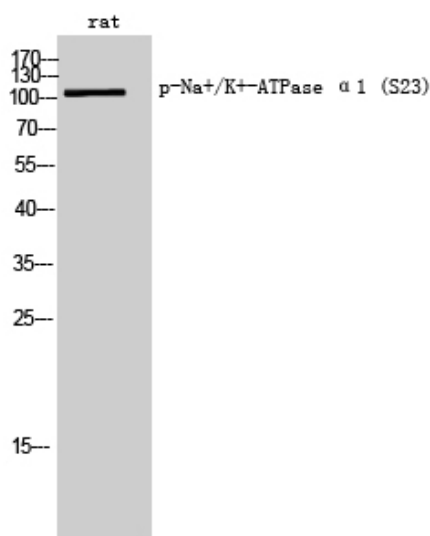
matters needing attention

Avoid repeated freezing and thawing!

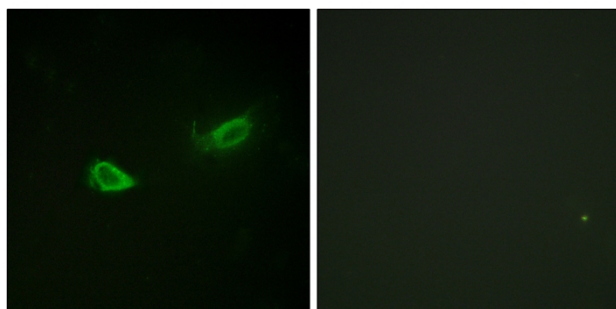
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

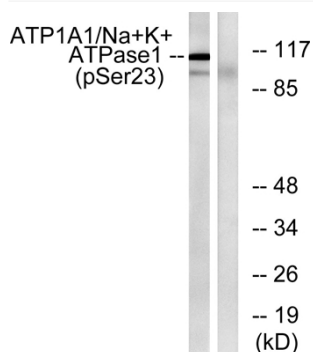
Products Images



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.