



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

Catalog No	YP-Ab-16336
Isotype	IgG
Reactivity	Rat
Applications	WB;IF;ELISA
Gene Name	ATP1A1
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	A1A1;AT1A1;AT1A1_HUMAN;ATP1A1;Atpa-1;ATPase Na ⁺ /K ⁺ transporting alpha 1 polypeptide;ATPase Na ⁺ /K ⁺ transporting subunit alpha 1;BC1319;EC 3.6.3.9;MGC3285;MGC38419;MGC5175;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;Na ⁺ /K ⁺ -ATPase α1
Observed Band	113kD
Calculated Molecular Weight	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

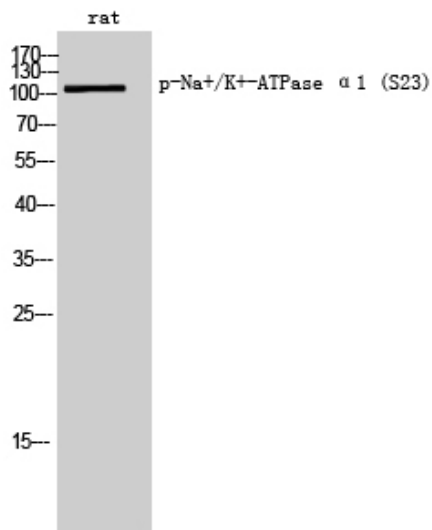
Avoid repeated freezing and thawing!

Usage suggestions

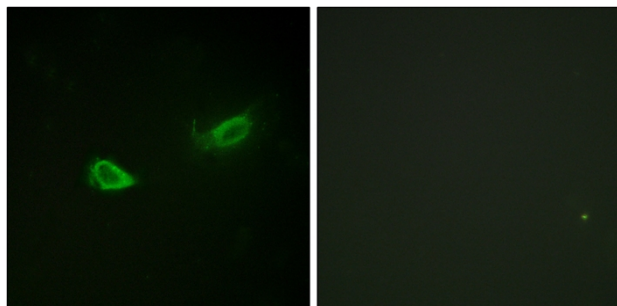
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



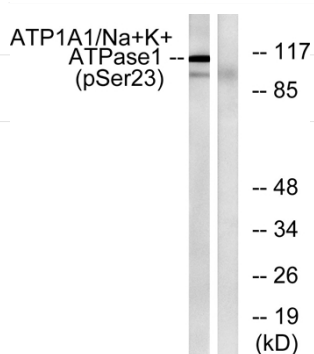
Products Images



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.