



# Na<sup>+</sup>/K<sup>+</sup>-ATPase α1 rabbit pAb

Cat No.:ES2893

For research use only

## Overview

<b>Product Name</b>	Na <sup>+</sup> /K <sup>+</sup> -ATPase α1 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ATPase. AA range:5-54
<b>Specificity</b>	Na <sup>+</sup> /K <sup>+</sup> -ATPase α1 Polyclonal Antibody detects endogenous levels of Na <sup>+</sup> /K <sup>+</sup> -ATPase α1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Sodium/potassium-transporting ATPase subunit alpha-1
<b>Gene Name</b>	ATP1A1
<b>Cellular localization</b>	Basolateral cell membrane ; Multi-pass membrane protein . Cell membrane, sarcolemma ; Multi-pass membrane protein . Cell projection, axon . Melanosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV. .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	112kD
<b>Human Gene ID</b>	476
<b>Human Swiss-Prot Number</b>	P05023
<b>Alternative Names</b>	ATP1A1; Sodium/potassium-transporting ATPase subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit;

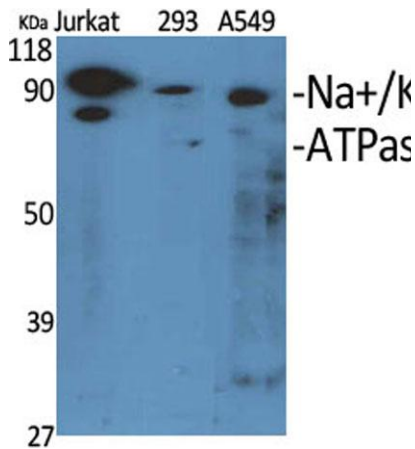




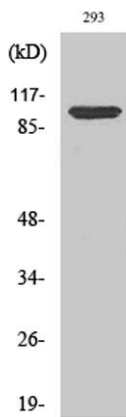
## Background

### Sodium pump subunit alpha-1

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na<sup>+</sup>/K<sup>+</sup>-ATPases. Na<sup>+</sup>/K<sup>+</sup>-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<sup>+</sup>/K<sup>+</sup>-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, May 2009],

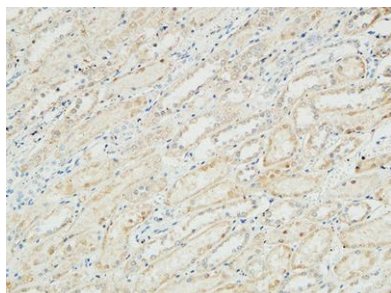


Western Blot analysis of various cells using Na<sup>+</sup>/K<sup>+</sup>-ATPase α1 Polyclonal Antibody diluted at 1:1000

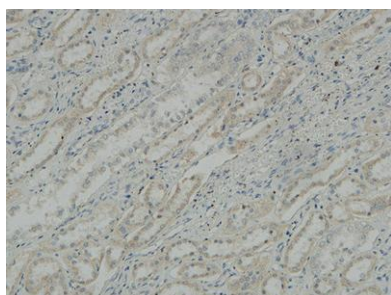


Western Blot analysis of 293 cells using Na<sup>+</sup>/K<sup>+</sup>-ATPase α1 Polyclonal Antibody diluted at 1:1000





Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min)



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