

## Sodium Potassium ATPase Rabbit mAb

Catalog No: #48913



Package Size: #48913-1 50ul #48913-2 100ul

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Support: tech@signalwayantibody.com

## Description

Product Name	Sodium Potassium ATPase Rabbit mAb
Clone No.	ST0533
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Synthetic peptide within Human ATP1A1 aa 39-83 / 1023.
Other Names	ATPase Na <sup>+</sup> /K <sup>+</sup> transporting alpha antibody adenosinetriphosphatase antibody AT1A1_HUMAN antibody ATP1A1 antibody ATP1A4 antibody ATP1AL2 antibody ATP1B antibody ATP1B1 antibody ATPase Na <sup>+</sup> /K <sup>+</sup> transporting alpha 1 polypeptide antibody ATPase Na <sup>+</sup> /K <sup>+</sup> transporting alpha 4 polypeptide antibody ATPase Na <sup>+</sup> /K <sup>+</sup> transporting beta 1 polypeptide antibody ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha polypeptide-like 2 antibody ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, beta 1 polypeptide antibody Beta 1-subunit of Na(+),K(+)-ATPase antibody Na(+)/K(+) ATPase alpha-1 subunit antibody Na(+)/K(+) ATPase alpha-4 subunit antibody Na <sup>+</sup> , K <sup>+</sup> ATPase alpha subunit antibody Na <sup>+</sup> /K <sup>+</sup> ATPase 1 antibody Na <sup>+</sup> /K <sup>+</sup> ATPase 4 antibody Na <sup>+</sup> /K <sup>+</sup> ATPase, alpha-D polypeptide antibody Na, K-ATPase beta-1 polypeptide antibody Na, K-ATPase, alpha-A catalytic polypeptide antibody Na,K-ATPase catalytic subunit alpha-A protein antibody Na,K-ATPase subunit alpha-C antibody polypeptide-like 2 antibody Sodium pump 1 antibody sodium pump 4 antibody Sodium pump subunit alpha-1 antibody sodium pump subunit alpha-4 antibody sodium pump subunit beta-1 antibody sodium-potassium ATPase catalytic subunit alpha-1 antibody sodium-potassium ATPase catalytic subunit alpha-4 antibody sodium-potassium ATPase subunit beta 1 (non-catalytic) antibody sodium-potassium ATPase, alpha 4 polypeptide antibody sodium-potassium-ATPase, alpha 1 polypeptide antibody Sodium/potassium transporting ATPase alpha 1 chain antibody Sodium/potassium transporting ATPase subunit beta 1 antibody sodium/potassium-dependent ATPase beta-1 subunit antibody sodium/potassium-transporting ATPase alpha-4 chain antibody sodium/potassium-transporting ATPase beta-1 chain antibody Sodium/potassium-transporting ATPase subunit alpha-1 antibody sodium/potassium-transporting ATPase subunit alpha-4 antibody
Accession No.	Swiss-Prot#:P05023
Uniprot	P05023
GeneID	476;
Calculated MW	100 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

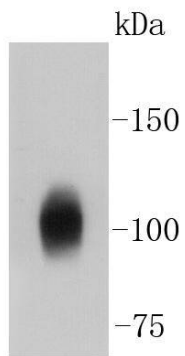
## Application Details

WB: 1:1,000-5,000

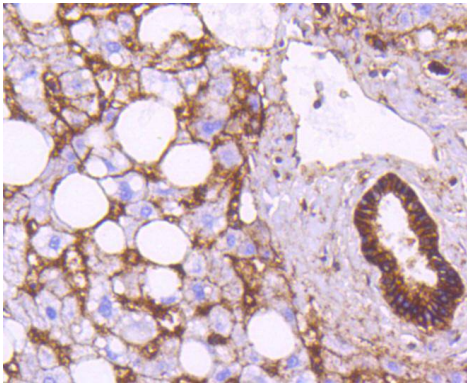
IHC: 1:50-1:200

ICC: 1:50-1:200

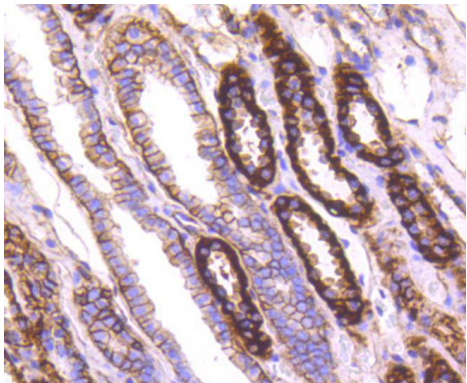
FC: 1:50-1:100



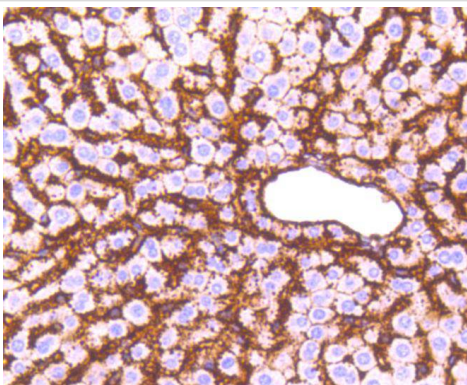
Western blot analysis of Sodium Potassium ATPase on A549 cell lysates using anti-Sodium Potassium ATPase antibody at 1/1,000 dilution.



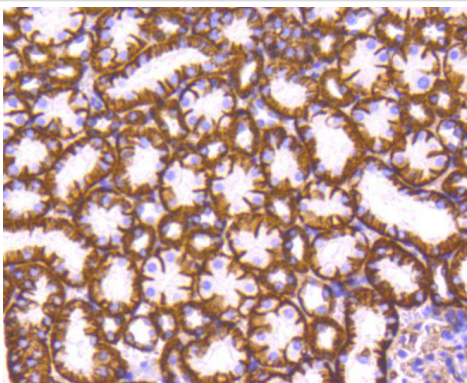
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-Sodium Potassium ATPase antibody. Counter stained with hematoxylin.



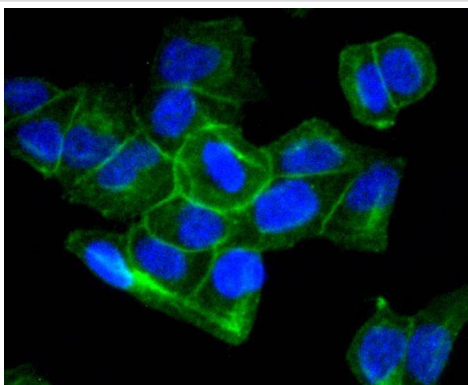
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Sodium Potassium ATPase antibody. Counter stained with hematoxylin.



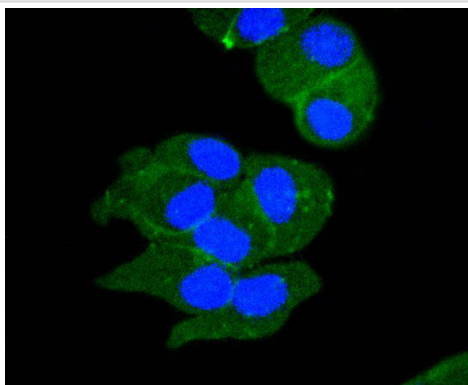
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Sodium Potassium ATPase antibody. Counter stained with hematoxylin.



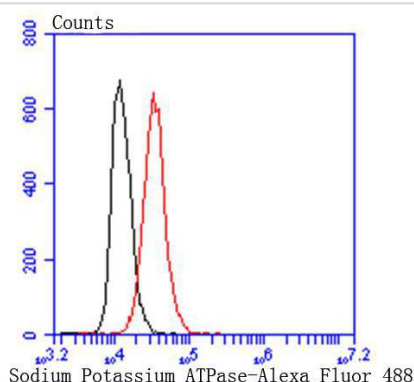
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-Sodium Potassium ATPase antibody. Counter stained with hematoxylin.



ICC staining Sodium Potassium ATPase in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Sodium Potassium ATPase in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HeLa cells with Sodium Potassium ATPase antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

## Background

The ubiquitously expressed sodium/potassium-ATPase (Na<sup>+</sup>/K<sup>+</sup>-ATPase) exists as an oligomeric plasma membrane complex that couples the hydrolysis of one molecule of ATP to the importation of three Na<sup>+</sup> ions and two K<sup>+</sup> ions against their respective electrochemical gradients. As a member of the P-type family of ion motives, Na<sup>+</sup>/K<sup>+</sup>-ATPase plays a critical role in maintaining cellular volume, resting membrane potential and Na<sup>+</sup>-coupled solute transport. Multiple isoforms of three subunits, α, β and γ, comprise the Na<sup>+</sup>/K<sup>+</sup>-ATPase oligomer. The α subunit contains the binding sites for ATP and the cations; the glycosylated β subunit ensures correct folding and membrane insertion of the α subunits. The small γ subunit co-localizes with the α subunit in nephron segments, where it increases the affinity of Na<sup>+</sup>/K<sup>+</sup>-ATPase for ATP. The β subunit, but not the γ subunit, is essential for normal activity of Na<sup>+</sup>/K<sup>+</sup>-ATPase.

Note: This product is for in vitro research use only