

Na⁺/K⁺ ATPase Antibody

Catalog No: #48318

Package Size: #48318-1 50ul #48318-2 100ul

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Description

Product Name	Na ⁺ /K ⁺ ATPase Antibody
Host Species	Mouse
Clone No.	1G1
Purification	ProA affinity purified
Applications	WB, IP, IF, IHC(P)
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Amino acids 551-850 of Na ⁺ /K ⁺ -ATPase α 1 of human origin.
Other Names	ATPase Na ⁺ /K ⁺ transporting alpha antibody adenosinetriphosphatase antibody AT1A1_HUMAN antibody ATP1A1 antibody ATP1A4 antibody ATP1AL2 antibody ATP1B antibody ATP1B1 antibody ATPase Na ⁺ /K ⁺ transporting alpha 1 polypeptide antibody ATPase Na ⁺ /K ⁺ transporting alpha 4 polypeptide antibody ATPase Na ⁺ /K ⁺ transporting beta 1 polypeptide antibody ATPase, Na ⁺ /K ⁺ transporting, alpha polypeptide-like 2 antibody ATPase, Na ⁺ /K ⁺ 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 ⁺ , K ⁺ ATPase alpha subunit antibody Na ⁺ /K ⁺ ATPase 1 antibody Na ⁺ /K ⁺ ATPase 4 antibody Na ⁺ /K ⁺ 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
Calculated MW	100-143kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at 4°C

Application Details

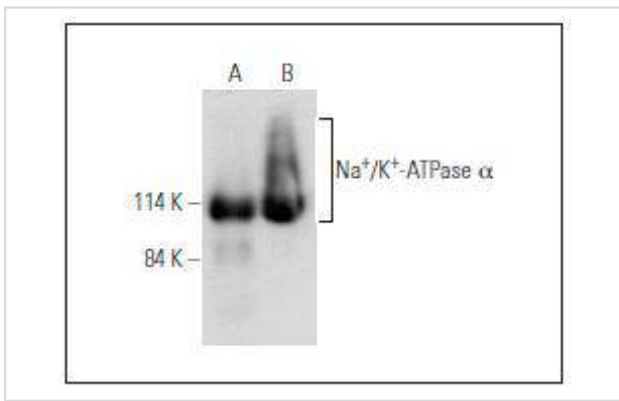
WB: 1:2,000-1:1,0000

IHC: 1:50-1:500

IP: 1-2 &mu;g per 100-500 &mu;g of total protein(1 ml of cell lysate)

Images

Western blot analysis of Na⁺/K⁺-ATPase α expression in human kidney (A) and human brain (B) tissue extracts.



Background

The ubiquitously expressed sodium/potassium-ATPase (Na⁺/K⁺-ATPase) exists as an oligomeric plasma membrane complex that couples the hydrolysis of one molecule of ATP to the importation of three Na⁺ ions and two K⁺ ions against their respective electrochemical gradients. As a member of the P-type family of ion motives, Na⁺/K⁺-ATPase plays a critical role in maintaining cellular volume, resting membrane potential and Na⁺-coupled solute transport. Multiple isoforms of three subunits, α , β and γ , comprise the Na⁺/K⁺-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⁺/K⁺-ATPase for ATP. The β subunit, but not the γ subunit, is essential for normal activity of Na⁺/K⁺-ATPase.

References

1. Z?gel, P., et al. 2013. The dimerization domain in outer segment guanylate cyclase is a Ca²⁺-sensitive control switch module. *Biochemistry* 52: 5065-5074.
2. Chen, F., et al. 2013. Phospholipase D2 mediates signaling by ATPase class I type 8B membrane 1. *J. Lipid Res.* 54: 379-385.
3. Bellocci, M., et al. 2010. Azaspiracid-1 inhibits endocytosis of plasma membrane proteins in epithelial cells. *Toxicol. Sci.* 117: 109-121.

Published Papers

el at., The relationship between myodural bridge, atrophy and hyperplasia of the suboccipital musculature, and cerebrospinal fluid dynamicsInSci RepOn2023 Nov 2byHeng Yang # 1, Xiao-Song Wei et al..PMID: 37919345, , (2023)
[PMID:37919345](https://pubmed.ncbi.nlm.nih.gov/37919345/)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.