

Anti-ATP1A1 Antibody (5G770)

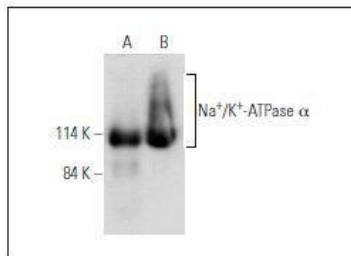
Product Details

Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 100-143 kDa.
Clone:	5G770
Purification:	ProA affinity purified

Applications

Verified Activity:

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



Application: IF,IHC-P,IP,WB

Recommended WB: 1:2000-10000; IHC-P: 1:50-500; IP: 1-2 μ g per 100-500 μ g of total protein(1 ml of cell lysate)

Properties

Stability & Storage: Store at 2°C-8°C for 12 months, do not freeze.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Amino acids 551-850 of Na⁺/K⁺-ATPase α 1 of human origin

Antigen Species: Human

Uniprot ID: P05023

Synonyms: Sodium pump subunit alpha-1;Na(+)/K(+) ATPase alpha-1 subunit;EC 3.6.3.9;ATP1A1; Sodium/potassium-transporting ATPase subunit alpha-1

Research 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 ;

A DRUG SCREENING EXPERT

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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