**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.

**SOURCE**

Na+/K+-ATPase α (H-300) is a rabbit polyclonal antibody raised against amino acids 551-850 mapping within an internal region of Na+/K+-ATPase α1 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Na+/K+-ATPase α (H-300) is recommended for detection of Na+/K+-ATPase α1, 2 and 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μg per 100-500 μg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:1000), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), immunoprecipitation [1-2 μg per 100-1000 μl], immunofluorescence staining of normal mouse heart frozen section showing membrane staining (A), immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing membrane and cytoplasmic staining of glandular cells (B).

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![Western blot analysis of Na+/K+-ATPase α1 expression in non-transfected 293T: sc-117732 (A), human Na+/K+-ATPase α1 transfected 293T: sc-118148 (B) and HeLa (C) whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.