

Product datasheet for **TA392911**

Sodium Potassium ATPase (ATP1A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500~1:1000 IHC: 1:50~1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human Na ⁺ /K ⁺ -ATPase α1 around the phosphorylation site of Serine 16.
Specificity:	p-Na ⁺ /K ⁺ -ATPase α1 (S16) polyclonal antibody detects endogenous levels of Na ⁺ /K ⁺ -ATPase α1 protein only when phosphorylated at Ser16.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 113 kDa
Gene Name:	ATPase Na ⁺ /K ⁺ transporting subunit alpha 1
Database Link:	Entrez Gene 476 Human P05023

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Background:

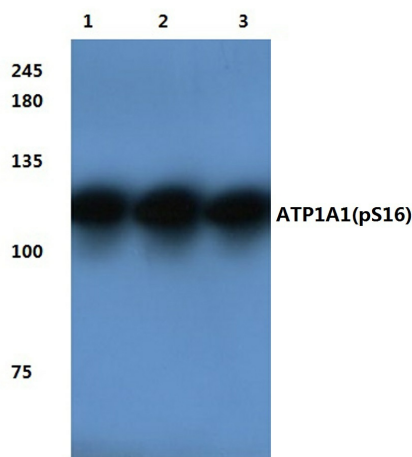
The sodium/potassium ATPase is an integral membrane enzyme found in all cells of higher organisms and is responsible for the ATP dependent transport of sodium and potassium across the cell membrane. This membrane bound enzyme is related to a number of other ATPases including sarcoplasmic and endoplasmic reticulum calcium ATPase (SERCA) and plasma membrane calcium ATPase (PMCA). The sodium / potassium ATPase consists of a large, multipass, transmembrane catalytic subunit, termed the alpha subunit, and an associated smaller glycoprotein, termed the beta subunit. Studies indicate that there are three isoforms of the alpha subunit (alpha 1, alpha 2, alpha 3) and two isoforms of the beta subunit (beta 1 and beta 2) encoded by two multigene families. The different isoforms of the sodium / potassium ATPase exhibit tissue specific and developmental patterns of expression. The alpha 1 and beta mRNAs are present in all cell types examined, whereas the alpha 2 and alpha 3 mRNAs exhibit a more restricted pattern of cell specific expression. The alpha subunit has been found in kidney, brain, heart, and to a lesser extent liver, skeletal and smooth muscle.

Synonyms:

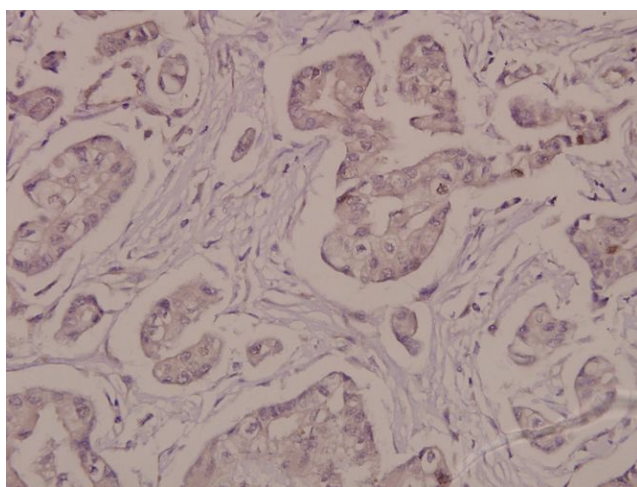
ATP1A1; Short name=Na(+)/K(+) ATPase alpha-1 subunit; Sodium/potassium-transporting ATPase subunit alpha-1; Sodium pump subunit alpha-1

Note:

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

Product images:


Western blot (WB) analysis of p-Na⁺/K⁺-ATPase α1 (S16) pAb at 1:2000 dilution Lane1:HEK293T whole cell lysate Lane2:HEK293T treated with EGF(100ng/ml,15 minutes) whole cell lysate Lane3:HEK293T treated with EGF(100ng/ml,30 minutes) whole cell lysate Lane4:C6 whole cell lysate Lane5:NIH-3T3 whole cell lysate



Immunohistochemistry (IHC) analyzes of p-Na⁺/K⁺-ATPase α1 (S16) pAb in paraffin-embedded human breast carcinoma tissue at 1:50.