

Na⁺/K⁺-ATPase α 1 (phospho-S16) polyclonal antibody

Catalog: BCP01162

Host: Rabbit

Reactivity: Human, Mouse, Rat

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.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 113 kDa

Swiss-Prot:

P05023

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

IHC: 1:50~1:200

Storage&Stability:

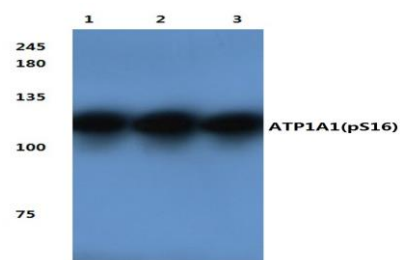
Store at 4 °C short term. Aliquot and store at -20 °C long

term. Avoid freeze-thaw cycles.

Specificity:

p-Na⁺/K⁺-ATPase α 1 (S16) polyclonal antibody detects endogenous levels of Na⁺/K⁺-ATPase α 1 protein only when phosphorylated at Ser16.

DATA:



Western blot (WB) analysis of p-Na⁺/K⁺-ATPase α 1 (S16) pAb at 1:2000 dilution

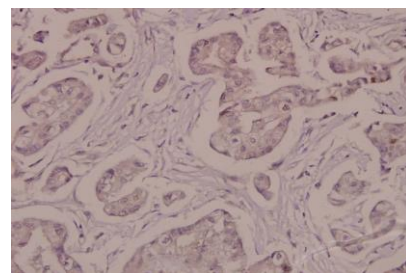
Lane1:HEK293T whole cell lysate

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 α 1 (S16) pAb in paraffin-embedded human breast carcinoma tissue at 1:50.

Note:

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

