

AP09188PU-N**Polyclonal Antibody to ATPase (NA/K) - Ig Fraction**

Alternate names:	ATPase Sodium/Potassium, Sodium pump 1, Sodium/potassium dependent ATPase
Quantity:	1 mg
Concentration:	10.0 mg/ml (by UV absorbance at 280 nm)
Background:	<p>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.</p> <p>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.</p>
Host / Isotype:	Chicken / Ig
Immunogen:	ATPase, Sodium, Potassium [Canine Kidney]
Format:	State: Lyophilized IgG fraction Purification: Ion exchange chromatography Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide Reconstitution: Restore with 0.1 ml of deionized water (or equivalent).
Applications:	Western Blot: 1/100 to 1/500. ELISA: 1/1,000 to 1/6,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts to Sodium Potassium ATPase. Species: Canine. Other species not tested.
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.