

Monoclonal Antibody to ATP1A1 (all alpha forms) - Ascites

Alternate names:	Na(+)/K(+) ATPase alpha-1 subunit, Sodium pump ATPase subunit alpha-1, Sodium/potassium-transporting ATPase subunit alpha, Sodium/potassium-transporting ATPase subunit alpha-1
Catalog No.:	SM5121
Quantity:	0.4 ml
Background:	<p>The antigen is purified sheep kidney alpha sodium/potassium ATPase. 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.</p>
Uniprot ID:	P04074
NCBI:	NP_001009360.1
GeneID:	443381
Host / Isotype:	Mouse / IgG1
Clone:	M7-PB-E9
Immunogen:	Purified alpha sodium/potassium ATPase from sheep kidney.
Format:	State: Liquid purified IgG containing 0.05% sodium azide Purification: Affinity chromatography on Protein A
Applications:	Immunohistochemistry: 1:100. ELISA: Assay dependent. Western Blot: 1:250; an ~110 kDa protein representing alpha sodium/potassium ATPase from MDCK cell extract. Immunoprecipitation: Assay dependent. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody detects sodium/potassium ATPase alpha from. This antibody recognizes an epitope between amino acid residues 646 and 652 of the sheep kidney alpha sodium/potassium ATPase.

Species: Canine, Mouse, Porcine, Rat, Bovine, Sheep, Human, Chicken.
Other species not tested.