

Basic Information

Product Name	Anti-ATP6V1A Antibody	
Gene Name	ATP6V1A	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, monkey, mouse, rat	
Tested Application	WB, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human ATP6V1A recombinant protein (Position: A37-D617).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70KD	
Dilution Ratios	Western blot(WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow cytometry (FCM):	1-3μg/1×10 ⁶ cells
	ELISA:	1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

V-type proton ATPase catalytic subunit A is an enzyme that in humans is encoded by the ATP6V1A gene. This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c'', and d. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This encoded protein is one of two V1 domain A subunit isoforms and is found in all tissues. Transcript variants derived from alternative polyadenylation exist.

Selected Validation Data

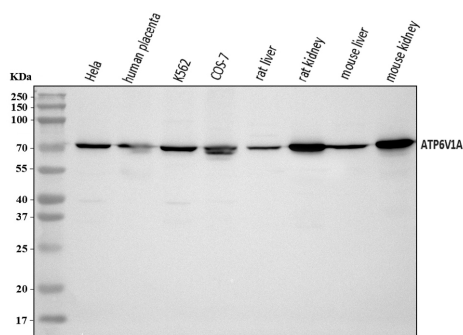


Figure 1. Western blot analysis of anti- ATP6V1A Antibody (A10401-1). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates.

Lane 2: human placenta tissue lysates,

Lane 3: K562 whole cell lysates,

Lane 4: COS-7 whole cell lysates,

Lane 5: rat liver tissue lysates,

Lane 6: rat kidney tissue lysates,

Lane 7: mouse liver tissue lysates,

Lane 8: mouse kidney tissue lysates.

Use rabbit anti- ATP6V1A 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ATP6V1A at approximately 70KD. The expected band size for ATP6V1A is at 68KD.