

Product datasheet for **CF502667**

ATP6V1B1 Mouse Monoclonal Antibody [Clone ID: OTI2D2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2D2
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:500~2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ATP6V1B1 (NP_001683) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	56.7 kDa
Gene Name:	ATPase H ⁺ transporting V1 subunit B1
Database Link:	NP_001683 Entrez Gene 110935 MouseEntrez Gene 312488 RatEntrez Gene 525 Human P15313



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Background:

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 B subunit isoforms and is found in the kidney. Mutations in this gene cause distal renal tubular acidosis associated with sensorineural deafness. [provided by RefSeq]

Synonyms:

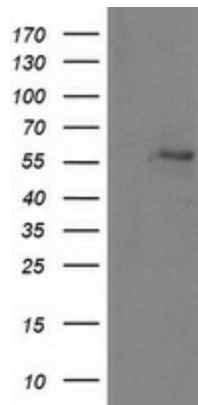
ATP6B1; RTA1B; VATB; VMA2; VPP3

Protein Families:

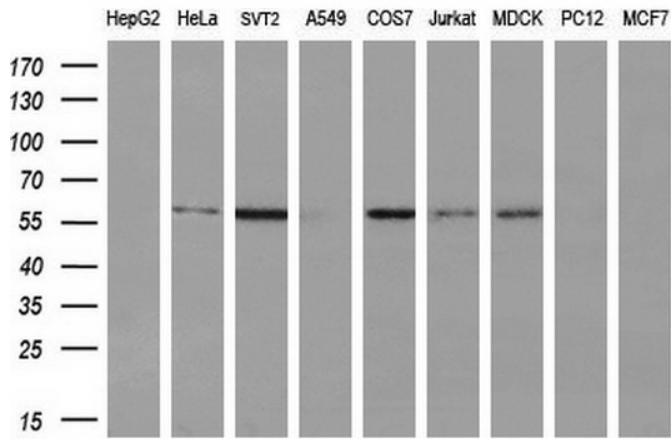
Druggable Genome

Protein Pathways:

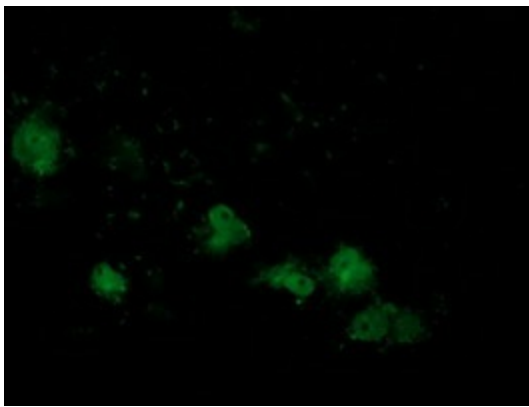
Epithelial cell signaling in Helicobacter pylori infection, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection

Product images:

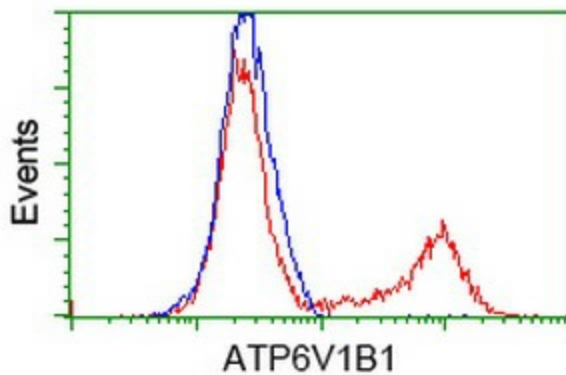
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ATP6V1B1 ([RC209462], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ATP6V1B1. Positive lysates [LY400635] (100ug) and [LC400635] (20ug) can be purchased separately from OriGene.



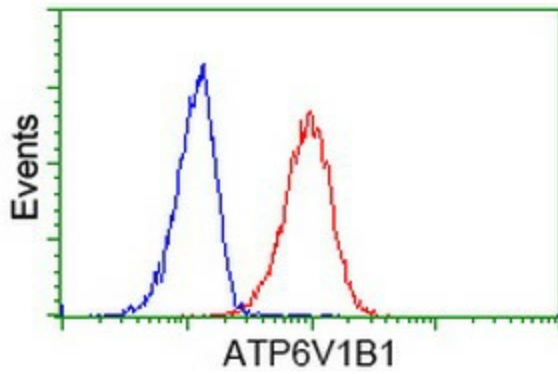
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ATP6V1B1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



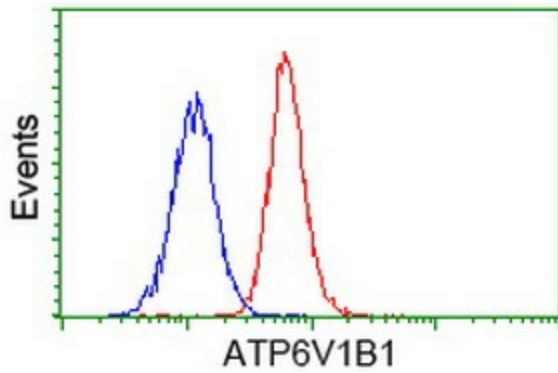
Anti-ATP6V1B1 mouse monoclonal antibody ([TA502667]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ATP6V1B1 ([RC209462]).



HEK293T cells transfected with either [RC209462] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ATP6V1B1 antibody ([TA502667]), and then analyzed by flow cytometry.



Flow cytometric Analysis of HeLa cells, using anti-ATP6V1B1 antibody ([TA502667]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-ATP6V1B1 antibody ([TA502667]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).