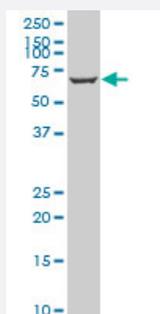


ATP6V1A polyclonal antibody (A01)

Catalog # H00000523-A01

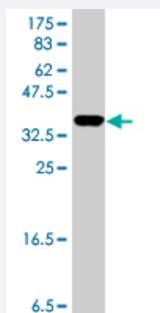
Size 50 uL

Applications



Western Blot (Cell lysate)

ATP6V1A polyclonal antibody (A01), Lot # 060717JCS1. Western Blot analysis of ATP6V1A expression in Daoy.



Western Blot detection against Immunogen (38.21 KDa) .

Specification

Product Description	Mouse polyclonal antibody raised against a partial recombinant ATP6V1A.
Immunogen	ATP6V1A (NP_001681, 508 a.a. ~ 617 a.a) partial recombinant protein with GST tag.
Sequence	TLEVAKLIKDDFLQQNGYTPYDRFCPFYKTVGMLSNMIAFYDMARRAVETTAQSDNKITWSIIREHM GDILYKLSSMKFKDPLKDGEAKIKSDYAQLLEDMQNAFRSLED
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (96); Rat (96)

Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (38.21 KDa) .
Storage Buffer	50 % glycerol
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

ATP6V1A polyclonal antibody (A01), Lot # 060717JCS1. Western Blot analysis of ATP6V1A expression in Daoy.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

Gene Info — ATP6V1A

Entrez GeneID	523
GeneBank Accession#	NM_001690
Protein Accession#	NP_001681
Gene Name	ATP6V1A
Gene Alias	ATP6A1, ATP6V1A1, HO68, VA68, VPP2, Vma1
Gene Description	ATPase, H ⁺ transporting, lysosomal 70kDa, V1 subunit A
Omim ID	607027
Gene Ontology	Hyperlink

Gene Summary

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. [provided by RefSeq]

Other Designations

ATPase, H⁺ transporting, lysosomal 70kD, V1 subunit A, isoform 1|ATPase, H⁺ transporting, lysosomal, alpha polypeptide, 70kD, isoform 1|ATPase, H⁺ transporting, lysosomal, subunit A1|H⁽⁺⁾-transporting two-sector ATPase, subunit A|H⁺-transporting ATPase ch

Publication Reference

- [Genome-wide CRISPR screen identifies host dependency factors for influenza A virus infection.](#)

Li B, Clohisey SM, Chia BS, Wang B, Cui A, Eisenhaure T, Schweitzer LD, Hoover P, Parkinson NJ, Nachshon A, Smith N, Regan T, Farr D, Gutmann MU, Bukhari SI, Law A, Sangesland M, Gat-Viks I, Digard P, Vasudevan S, Lingwood D, Dockrell DH, Doench JG, Baillie JK, Hacohen N.

Nature Communications 2020 Jan; 11(1):164.

Application: WB-Tr, Human, A-549 cells

- [Oscillatory cAMP signaling rapidly alters H3K4 methylation.](#)

Huff TC, Camarena V, Sant DW, Wilkes Z, Van Booven D, Aron AT, Muir RK, Renslo AR, Chang CJ, Monje PV, Wang G.

Life Science Alliance 2019 Dec; 3(1):e201900529.

Application: WB-Tr, Mouse, NS1 cells

- [Isoform-specific gene disruptions reveal a role for the V-ATPase subunit a4 isoform in the invasiveness of 4T1-12B breast cancer cells.](#)

McGuire CM, Collins MP, Sun-Wada G, Wada Y, Forgac M.

The Journal of Biological Chemistry 2019 Jul; 294(29):11248.

Application: IF, WB, Mouse, 4T1-12B cells

- [Inhibition of pH regulation as a therapeutic strategy in hypoxic human breast cancer cells.](#)

Meehan J, Ward C, Turnbull A, Bukowski-Wills J, Finch AJ, Jarman EJ, Xintaropoulou C, Martinez-Perez C, Gray M, Pearson M, Mullen P, Supuran CT, Carta F, Harrison DJ, Kunkler IH, Langdon SP.

Oncotarget 2017 Jun; 8(26):42857.

Application: WB, Human, HBL-100, MCF-7, MDA-MB-231 cells

- [mTORC1 and muscle regeneration are regulated by the LINC00961-encoded SPAR polypeptide.](#)

Matsumoto A, Pasut A, Matsumoto M, Yamashita R, Fung J, Monteleone E, Saghatelian A, Nakayama KI, Clohessy JG, Pandolfi PP.

Nature 2017 Jan; 541(7636):228.

Application: WB, Human, HEK 293T cells

- [Regulated Assembly of the V-ATPase is Increased During Cluster Disruption-Induced Maturation of Dendritic Cells Through a PI-3 Kinase/mTOR-dependent Pathway.](#)

Lieberman R, Bond S, Shainheit MG, Stadecker MJ, Forgac M.

The Journal of Biological Chemistry 2014 Jan; 289(3):1355.

Application: WB-Ce, Mouse, Dendritic cells

- [A cytotoxic type III secretion effector of Vibrio parahaemolyticus targets vacuolar H⁺-ATPase subunit c and ruptures host cell lysosomes.](#)

Matsuda S, Okada N, Kodama T, Honda T, Iida T.

PLoS Pathogens 2012 Jul; 8(7):e1002803.

Application: WB-Tr, Human, HeLa cells

- [Inhibition of activated Stat3 reverses drug resistance to chemotherapeutic agents in gastric cancer cells.](#)

Huang S, Chen M, Shen Y, Shen W, Guo H, Gao Q, Zou X.

Cancer Letters 2012 Feb; 315(2):198.

Application: WB-Ce, Human, SGC7901 cells

- [Effects and mechanisms of proton pump inhibitors as a novel chemosensitizer on human gastric adenocarcinoma \(SGC7901\) cells.](#)

Chen M, Zou X, Luo H, Cao J, Zhang X, Zhang B, Liu W.

Cell Biology International 2009 Sep; 33(9):1008.

Application: WB-Ce, Human, SGC7901 cells

Pathway

- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Metabolic pathways](#)
- [Oxidative phosphorylation](#)
- [Vibrio cholerae infection](#)