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Rabbit Anti-ATP6V0A1 antibody

SL7410R

Product Name:	ATP6V0A1
Chinese Name:	氢离子转运ATP合成酶A1抗体
Alias:	V ATPase; V ATPase A; V ATPase A1; Vacuolar proton ATPase a1; V-type proton ATPase 95 kDa subunit a isoform 1; V-ATPase 95 kDa isoform a1; AltName: Full=Vacuolar proton pump subunit a1; Vacuolar proton translocating ATPase 95 kDa subunit a isoform 1; VPP1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	96kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human V-ATPase A1:41-140/837
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The subunit of the vacuolar proton pump is a V-ATPase that has two different isoforms. The type I isoform contains an 18-base pair insert and is expressed in brain, whereas the truncated type II isoform is more widely expressed, including lung, kidney and spleen. The subunit of the vacuolar proton pump is located in clathrin-coated vesicles and is also

found in osteoclasts. It consists of two fundamental domains, a hydrophilic amino-terminus, which has greater than 30% charged residues, and a hydrophobic carboxy terminus, which contains at least six transmembrane regions. The proton pump functions in coupling ATP hydrolysis by the cytoplasmic subunits to proton translocation by the intramembranous components of the pump. The inactivation of the osteoclast-specific vacuolar proton ATPase subunit is responsible for the lack of the enzyme in the apical membranes of osteoclast cells in osteosclerotic mutant mice, thus preventing the resorption function of these cells and leading to the osteopetrotic phenotype. The subunit, which co-localizes with the late endosomal marker Rab7 on vacuolar membranes, is essential for vacuole formation by selective swelling of late endosomes.

Function:
Required for assembly and activity of the vacuolar ATPase. Potential role in differential targeting and regulation of the enzyme for a specific organelle (By similarity).

Subunit:
The V-ATPase is a heteromultimeric enzyme composed of at least thirteen different subunits. It has a membrane peripheral V1 sector for ATP hydrolysis and an integral V0 for proton translocation. The V1 sector comprises subunits A-H, whereas V0 includes subunits a, d, c, c', and c".

Subcellular Location:
Cytoplasmic vesicle membrane; Multi-pass membrane protein. Melanosome. Note=Coated vesicle. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Similarity:
Belongs to the V-ATPase 116 kDa subunit family.

SWISS:
Q93050

Gene ID:
535

Database links:

Entrez Gene: 395474Chicken

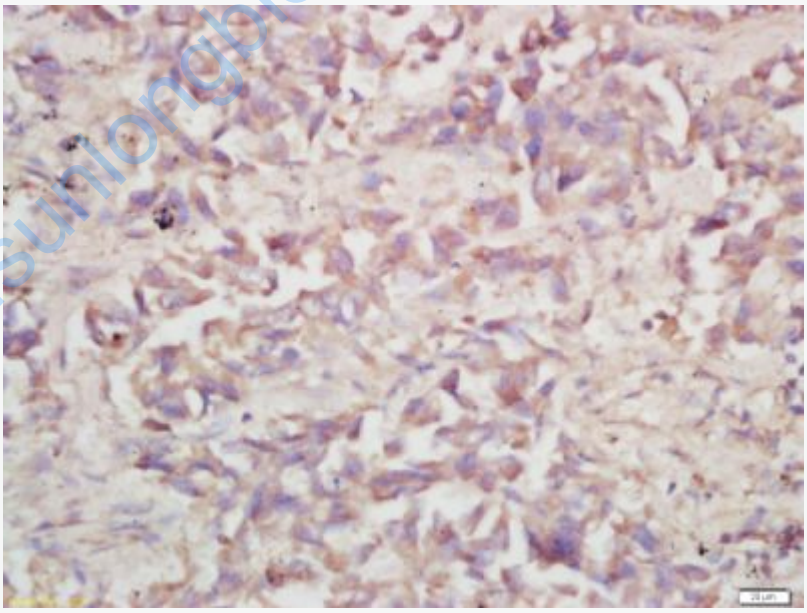
Entrez Gene: 286768Cow

Entrez Gene: 535Human

Entrez Gene: 11975Mouse

Entrez Gene: 29757Rat

Omim: 192130Human

	SwissProt: Q9I8D0Chicken SwissProt: Q29466Cow SwissProt: Q93050Human SwissProt: Q9Z1G4Mouse SwissProt: P25286Rat Unigene: 463074Human Unigene: 340818Mouse Unigene: 475829Mouse Unigene: 6015Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer

	(normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-V-ATPase A1 Polyclonal Antibody, Unconjugated(SL7410R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining