

ATP6V1G2 Rabbit pAb

ATP6V1G2 Rabbit pAb Catalog # AP54324

Product Information

Application IHC-P, IHC-F, IF

Primary Accession 095670

Reactivity Pig, Mouse, Rabbit, Dog, Horse

Host Rabbit Clonality Polyclonal 13604 Calculated MW **Physical State** Liquid

KLH conjugated synthetic peptide derived from human ATP6V1G2 **Immunogen**

51-118/118 **Epitope Specificity** Isotype IgG

affinity purified by Protein A **Purity**

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Melanosome. Note=Highly enriched in late-stage melanosomes.

Belongs to the V-ATPase G subunit family. **SIMILARITY**

SUBUNIT V-ATPase is a heteromultimeric enzyme composed of a peripheral catalytic V1 complex (components A to H) attached to an integral membrane V0 proton

pore complex (components: a, c, c', c'' and d).

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes a component of vacuolar ATPase (V-ATPase), a

multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells. V-ATPase dependent 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 three V1 domain G subunit proteins. This gene had previous gene symbols of ATP6G and ATP6G2.

Alternatively spliced transcript variants encoding different isoforms have been described. Read-through transcription also exists between this gene and the downstream DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B (DDX39B) gene.

[provided by RefSeq, Feb 2011]

Additional Information

Gene ID 534 Other Names V-type proton ATPase subunit G 2, V-ATPase subunit G 2, V-ATPase 13 kDa

subunit 2, Vacuolar proton pump subunit G 2, ATP6V1G2, ATP6G, ATP6G2,

NG38

Target/Specificity Brain.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name ATP6V1G2

Synonyms ATP6G, ATP6G2, NG38

Function Subunit of the V1 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit

enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons. V-ATPase is responsible for acidifying and maintaining the pH of intracellular

compartments and in some cell types, is targeted to the plasma membrane,

where it is responsible for acidifying the extracellular environment.

Cellular Location Melanosome. Cytoplasmic vesicle, clathrin-coated vesicle membrane

{ECO:0000250|UniProtKB:Q0VCV6}; Peripheral membrane protein.

Note=Highly enriched in late-stage melanosomes

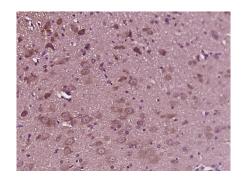
Tissue Location Brain..

Background

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells. V-ATPase dependent 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 three V1 domain G subunit proteins. This gene had previous gene symbols of ATP6G and ATP6G2. Alternatively spliced transcript variants encoding different isoforms have been described. Read-through transcription also exists between this gene and the downstream DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B (DDX39B) gene. [provided by RefSeq, Feb 2011]

Images

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ATP6V1G2) Polyclonal Antibody, Unconjugated (AP54324) at 1:500 overnight at 4°C,



followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.