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ATP5C1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9239a

Specification

ATP5C1 Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P36542
Other Accession	P35435, Q91VR2, Q4R5B0, P05631
Reactivity	**Human**
Predicted	**Bovine, Monkey, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**40-67**

ATP5C1 Antibody (N-term) - Additional Information

Gene ID 509

Other Names
ATP synthase subunit gamma, mitochondrial, F-ATPase gamma subunit, ATP5C1, ATP5C, ATP5CL1

Target/Specificity
This ATP5C1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 40-67 amino acids from the N-terminal region of human ATP5C1.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ATP5C1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5C1 Antibody (N-term) - Protein Information

Name ATP5F1C (HGNC:833)

Function Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(1) domain and the central stalk which is part of the complex rotary element. The gamma subunit protrudes into the catalytic domain formed of alpha(3)beta(3). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.

Cellular Location
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P05631}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05631}; Matrix side {ECO:0000250|UniProtKB:P05631}

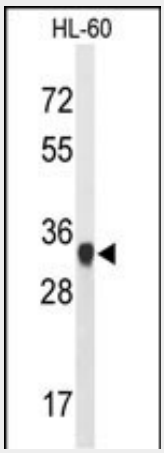
Tissue Location
Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

ATP5C1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

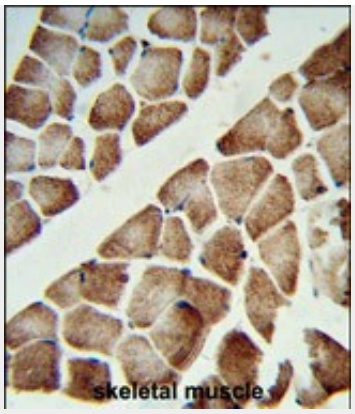
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP5C1 Antibody (N-term) - Images

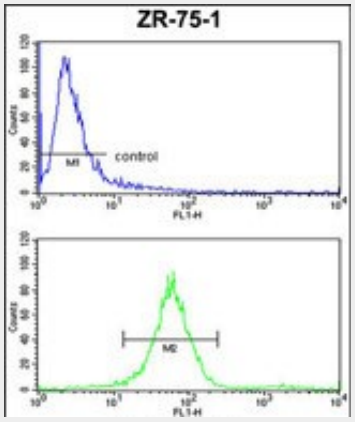


Western blot analysis of ATP5C1 Antibody (N-term) (Cat. #AP9239a) in HL-60 cell line lysates (35ug/lane).ATP5C1 (arrow) was detected using the purified Pab.

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Formalin-fixed and paraffin-embedded human skeletal muscle reacted with ATP5C1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ATP5C1 Antibody (N-term) (Cat.#AP9239a) FC analysis of ZR-75-1 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ATP5C1 Antibody (N-term) - Background

ATP5C1 encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3.

ATP5C1 Antibody (N-term) - References

Wheeler,H.E., et.al, PLoS Genet. 5 (10), E1000685 (2009)
Wang,L., et.al, Cancer Epidemiol. Biomarkers Prev. 17 (12), 3558-3566 (2008)

ATP5C1 Antibody (N-term) - Citations

- Olesoxime favors oligodendrocyte differentiation through a functional interplay between mitochondria and microtubules.