

ATP5C1 (aa27-40) Antibody (internal region, near N-Term)

Peptide-affinity purified goat antibody Catalog # AF4111a

Specification

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) - Product Information

Application WB
Primary Accession P36542

Other Accession NP 005165.1, NP 001001973.1, 509, 11949

(mouse), 116550 (rat)

Reactivity

Predicted Human, Mouse, Dog, Cow

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 32996

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) - Additional Information

Gene ID 509

Other Names

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

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5C1 (aa27-40) Antibody (internal region, near 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 (aa27-40) Antibody (internal region, near N-Term) - Protocols

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

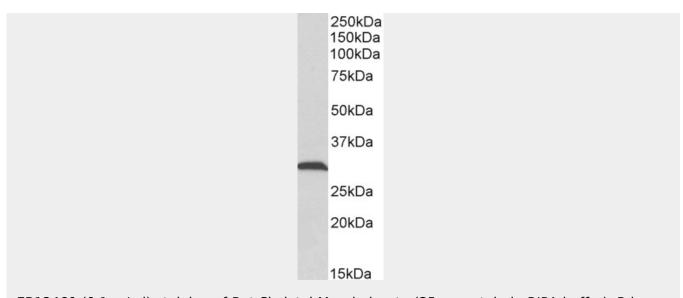
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) - Images



AF4111a (0.1 μg/ml) staining of Rat Skeletal Muscle lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





EB12460 ($0.1\mu g/ml$) staining of Rat Skeletal Muscle lysate ($35\mu g$ protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) - Background

The immunizing peptide represents the N terminus of the mature protein. This antibody is expected to recognize both reported isoforms (NP_005165.1; NP_001001973.1).

ATP5C1 (aa27-40) Antibody (internal region, near N-Term) - References

Mechanically driven ATP synthesis by F1-ATPase. Itoh H, Takahashi A, Adachi K, Noji H, Yasuda R, Yoshida M, Kinosita K. Nature 2004 Jan 427 (6973): 465-8. PMID: 14749837