

## ATP5C1 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF4112a

## **Specification**

## ATP5C1 Antibody (C-Term) - Product Information

Application WB, E
Primary Accession P36542

Other Accession NP 005165.1, NP 001001973.1, 509, 11949

(mouse), 116550 (rat)

Reactivity Human, Rat Predicted Mouse, Dog

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

#### ATP5C1 Antibody (C-Term) - Additional Information

Gene ID 509

#### **Other Names**

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

#### **Dilution**

WB~~1:1000 E~~N/A

#### **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 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## ATP5C1 Antibody (C-Term) - Protein Information

## Name ATP5F1C (HGNC:833)

#### **Function**

Subunit gamma, of the mitochondrial membrane ATP synthase complex (F(1)F(0)) ATP synthase or Complex V) that 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 (PubMed:<a href="http://www.uniprot.org/citations/37244256" target="\_blank">37244256</a>). ATP synthase complex consist of a soluble F(1) head domain - the catalytic core - and a membrane F(1) domain - the membrane proton channel (PubMed:<a

href="http://www.uniprot.org/citations/37244256" target="\_blank">37244256</a>). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:<a href="http://www.uniprot.org/citations/37244256"

target="\_blank">37244256</a>). 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 (Probable). In vivo, can only synthesize ATP although its ATP hydrolase activity can be activated artificially in vitro (By similarity). With the central stalk subunit delta, is essential for the biogenesis of F(1) catalytic part of the ATP synthase complex namely in the formation of F1 assembly intermediate (PubMed:<a href="http://www.uniprot.org/citations/29499186" target="\_blank">29499186</a>).

#### **Cellular Location**

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

#### **Tissue Location**

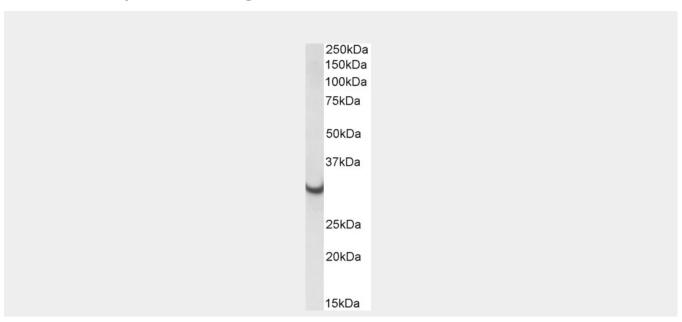
Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

## ATP5C1 Antibody (C-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 (C-Term) - Images





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AF4112a (0.01 μg/ml) staining of Rat Heart lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# ATP5C1 Antibody (C-Term) - Background

This antibody is expected to recognize both reported isoforms (NP\_005165.1; NP\_001001973.1).

# ATP5C1 Antibody (C-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