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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, Pep-ELISA**
Primary Accession	P36542
Other Accession	NP_005165.1, NP_001001973.1, 509, 11949 (mouse), 116550 (rat)
Reactivity	**Rat**
Predicted	**Human, Mouse, Dog**
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

Dilution
WB~~1:1000
Pep-ELISA~~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 (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
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:37244256). 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:37244256). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:37244256). 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:29499186).

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

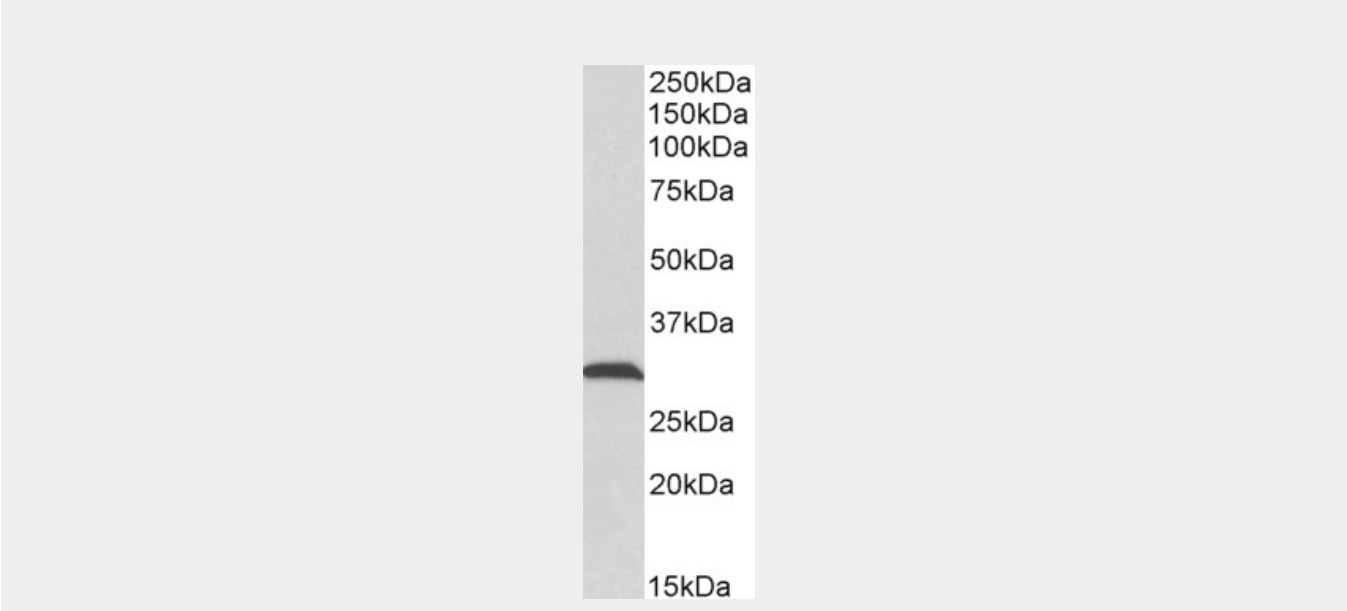
Tissue Location
Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



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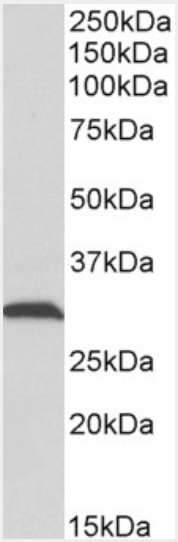
AF4111a (0.1 µg/ml) staining of Rat Skeletal Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB12460 (0.1µg/ml) staining of Rat Skeletal Muscle lysate (35µg 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