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ATP5G1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22100c

Specification

ATP5G1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P05496
Other Accession	P32876, Q9CR84, A1XQS5, Q06645, P17605, P07926, Q06055, P56383, Q5RAP9, Q06646, Q06056, Q3ZC75, P48201, P56384, Q5RFL2, Q71S46
Reactivity	**Human, Rat**
Predicted	**Bovine, Mouse, Pig, Sheep**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**14277**

ATP5G1 Antibody (Center) - Additional Information

Gene ID 516

Other Names
ATP synthase F(0) complex subunit C1, mitochondrial, ATP synthase lipid-binding protein, ATP synthase proteolipid P1, ATP synthase proton-transporting mitochondrial F(0) complex subunit C1, ATPase protein 9, ATPase subunit c, ATP5G1

Target/Specificity
This ATP5G1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 41-71 amino acids from the Central region of human ATP5G1.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

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
ATP5G1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5G1 Antibody (Center) - Protein Information

Name ATP5MC1 (HGNC:841)

Function Subunit c, 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 (Probable). 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). With the subunit a (MT- ATP6), forms the proton-conducting channel in the F(0) domain, that contains two crucial half-channels (inlet and outlet) that facilitate proton movement from the mitochondrial intermembrane space (IMS) into the matrix (PubMed:37244256). Protons are taken up via the inlet half- channel and released through the outlet half-channel, following a Grotthuss mechanism (PubMed:37244256).

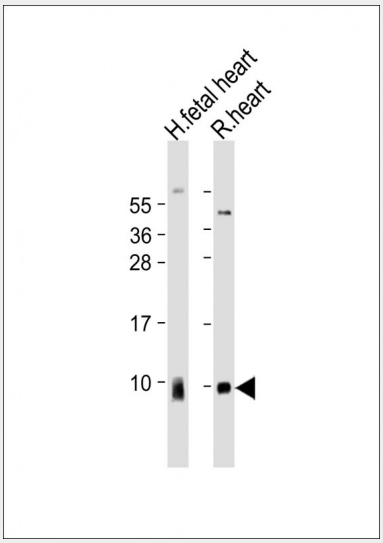
Cellular Location
Mitochondrion membrane; Multi-pass membrane protein

ATP5G1 Antibody (Center) - 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

ATP5G1 Antibody (Center) - Images



All lanes : Anti-ATP5G1 Antibody (Center) at 1:2000 dilution Lane 1: human fetal heart lysate Lane 2: rat heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG,

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(H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ATP5G1 Antibody (Center) - Background

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(0) domain. A homomeric c-ring of probably 10 subunits is part of the complex rotary element.

ATP5G1 Antibody (Center) - References

Dyer M.R.,et al.Biochem. J. 293:51-64(1993).
Higuti T.,et al.Biochim. Biophys. Acta 1173:87-90(1993).
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