10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATP5F1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20527c

Specification

ATP5F1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P24539
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**28909**
Antigen Region	**161-195**

ATP5F1 Antibody (Center) - Additional Information

Gene ID 515

Other Names
ATP synthase F(0) complex subunit B1, mitochondrial, ATP synthase proton-transporting mitochondrial F(0) complex subunit B1, ATP synthase subunit b, ATPase subunit b, ATP5F1

Target/Specificity
This ATP5F1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 161-195 amino acids from the Central region of human ATP5F1.

Dilution
WB~~1:1000
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
ATP5F1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5F1 Antibody (Center) - Protein Information

Name ATP5PB (HGNC:840)

Synonyms ATP5F1

Function Subunit b, 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). Part of the complex F(0) domain (PubMed:37244256). Part of the complex F(0) domain and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements (By similarity).

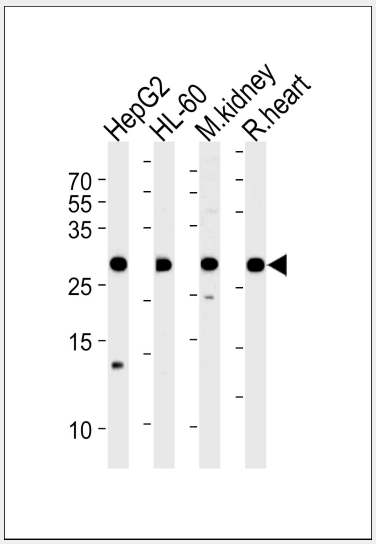
Cellular Location
Mitochondrion. Mitochondrion inner membrane.

ATP5F1 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

ATP5F1 Antibody (Center) - Images



ATP5F1 Antibody (Center) (Cat. #AP20527c) western blot analysis in HepG2,HL-60 cell line,mouse kidney and rat heart tissue lysates (35ug/lane).This demonstrates the ATP5F1 antibody detected the ATP5F1 protein (arrow).

ATP5F1 Antibody (Center) - Background

10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.

ATP5F1 Antibody (Center) - References

Higuti T., et al. Biochem. Biophys. Res. Commun. 178:1014-1020(1991).
Gregory S.G., et al. Nature 441:315-321(2006).
Choudhary C., et al. Science 325:834-840(2009).
Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).