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ATP5I Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5003

Specification

ATP5I Antibody (C-term) - Product Information

Application	**IF, IHC-P, WB,E**
Primary Accession	P56385
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**H=8;M=8 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

ATP5I Antibody (C-term) - Additional Information

Gene ID 521

Antigen Region
55-89

Other Names
ATP synthase subunit e, mitochondrial, ATPase subunit e, ATP5I, ATP5K

Dilution
IF~~1:25
IHC-P~~1:25
WB~~1:1000

Target/Specificity
This ATP5I antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 55-89 amino acids from the C-terminal region of human ATP5I.

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
ATP5I Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5I Antibody (C-term) - Protein Information

Name ATP5ME (HGNC:846)

Function
Subunit e, 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).

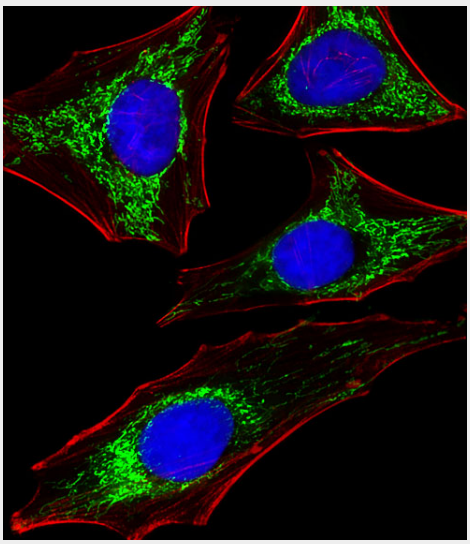
Cellular Location
Mitochondrion. Mitochondrion inner membrane.

ATP5I Antibody (C-term) - Protocols

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

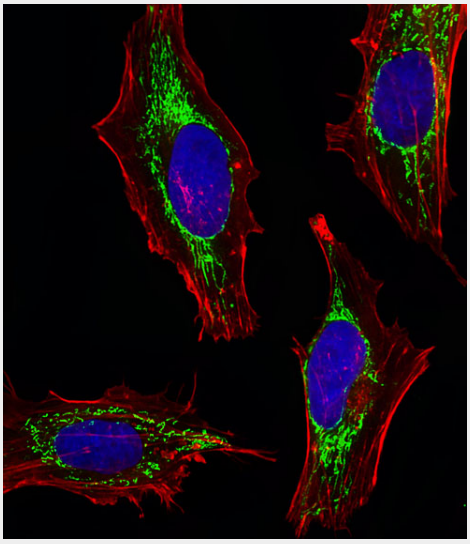
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP5I Antibody (C-term) - Images



Fluorescent image of Hela cells stained with ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was

diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



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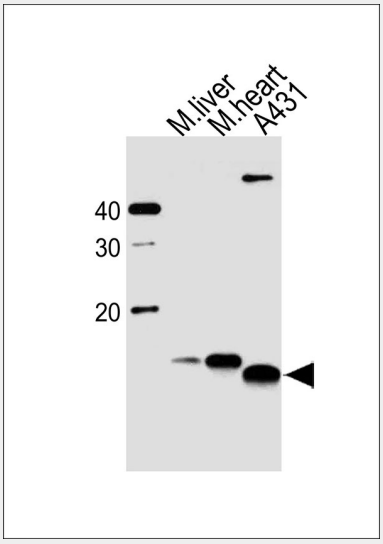

Western blot analysis of lysates from mouse liver, heart tissue and A431 cell line (from left to right), using ATP5I Antibody (C-term)(Cat. #AW5003). AW5003 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.

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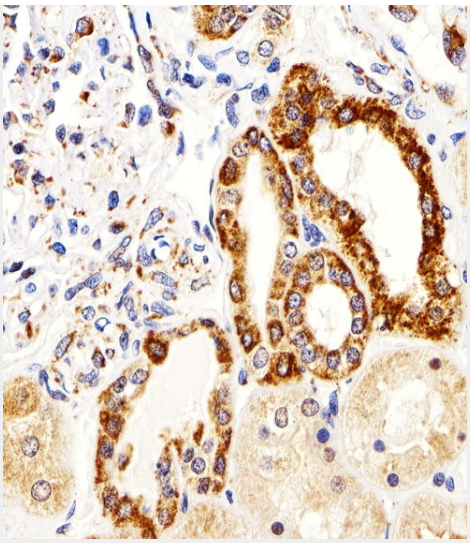
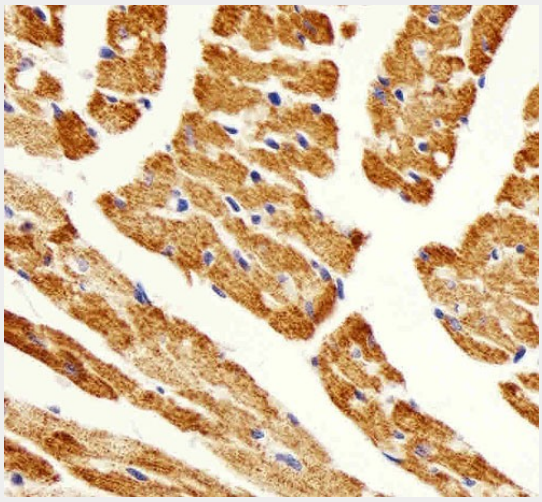


Immunohistochemical analysis of paraffin-embedded H. kidney section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded M. heart section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

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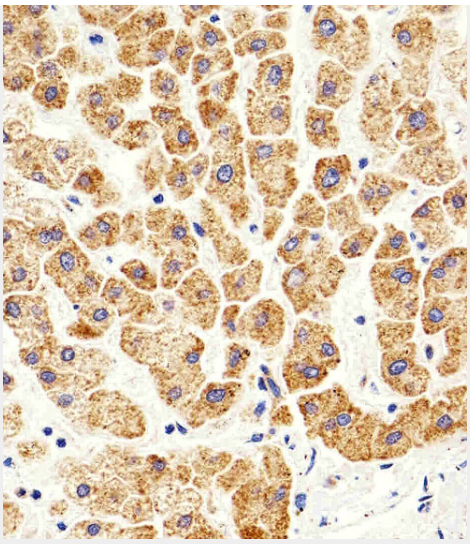

Immunohistochemical analysis of paraffin-embedded H. liver section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

ATP5I Antibody (C-term) - 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. Minor subunit located with subunit a in the membrane.

ATP5I Antibody (C-term) - References

Fujiwara T.,et al.Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Xu G.,et al.Proc. Natl. Acad. Sci. U.S.A. 106:19310-19315(2009).
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).
Van Damme P.,et al.Proc. Natl. Acad. Sci. U.S.A. 109:12449-12454(2012).