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ATP5I Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5003

Product Information

Application	IF, IHC-P, WB
Primary Accession	P56385
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	7933
Isotype	Rabbit IgG
Antigen Source	HUMAN

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~~1:100~500 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.

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.

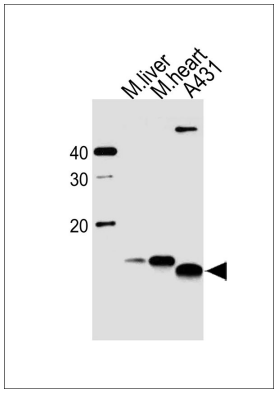
Background

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.

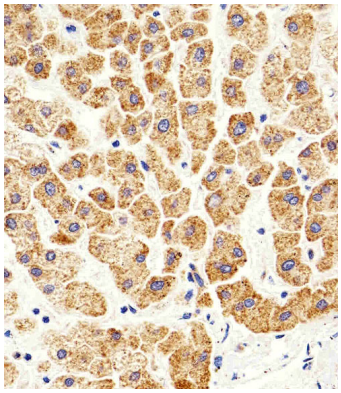
References

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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).

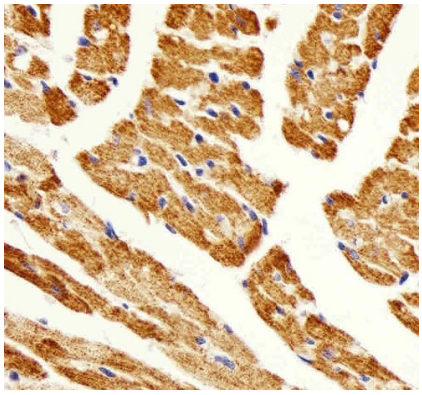
Images



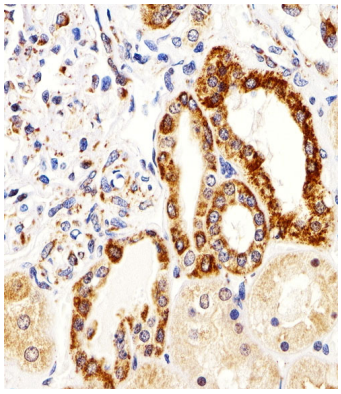
Western blot analysis of lysates from mouse liver, heart tissue and A431 cell line (from left to right), using ATP5I Antibody (C-term)(Cat. #AW5003). AW5003 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



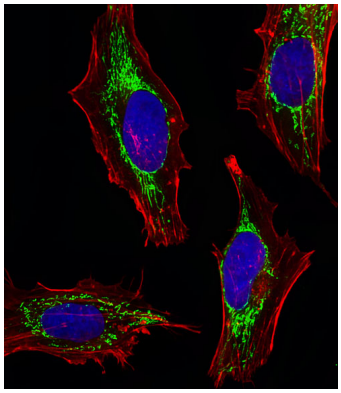
Immunohistochemical analysis of paraffin-embedded H. liver section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



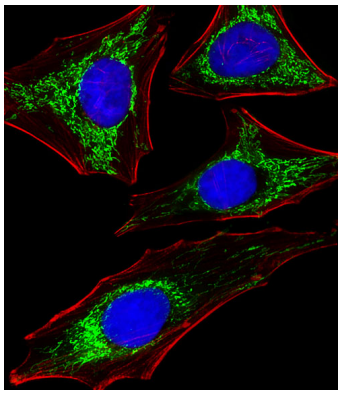
Immunohistochemical analysis of paraffin-embedded M. heart section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



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.



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 lgG 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).



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 lgG 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.