

ATP5I Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5003

Specification

ATP5I Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Isotype Antigen Source IF, WB, IHC-P,E <u>P56385</u> Human, Mouse Rabbit polyclonal H=8;M=8 KDa Rabbit IgG 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 WB~~1:1000 IHC-P~~1:25

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

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.

Cellular Location

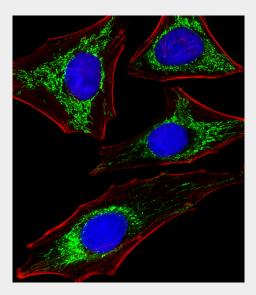
Mitochondrion. Mitochondrion inner membrane.

ATP5I Antibody (C-term) - Protocols

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

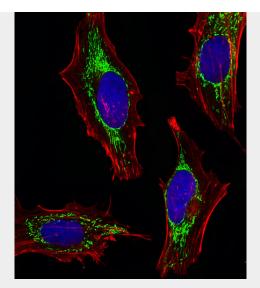
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ATP5I Antibody (C-term) - Images

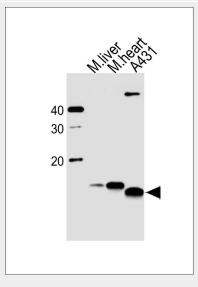


Fluorescent image of Hela cells stained with ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



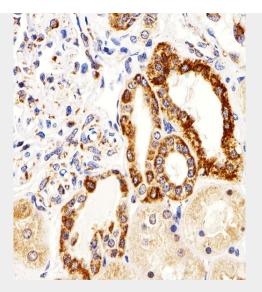


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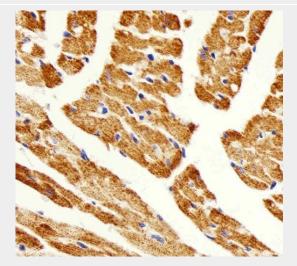


Western blot analysis of lysates from mouse liver, heart tissue and A431 cell line (from left to right), using ATP5I Antibody (C-term)(Cat. #AW5003). AW5003 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.



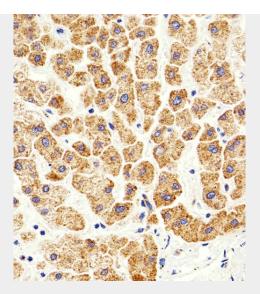


Immunohistochemical analysis of paraffin-embedded H. kidney section using ATP5I Antibody (C-term)(Cat#AW5003). AW5003 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



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.





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).