

ATP5I Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50736**Specification**

ATP5I Antibody - Product Information

Application	WB
Primary Accession	P56385
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8 KDa
Antigen Region	42-69

ATP5I Antibody - Additional Information**Gene ID** 521**Other Names**

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

Dilution

WB~~1:1000

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

ATP5I Antibody - 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

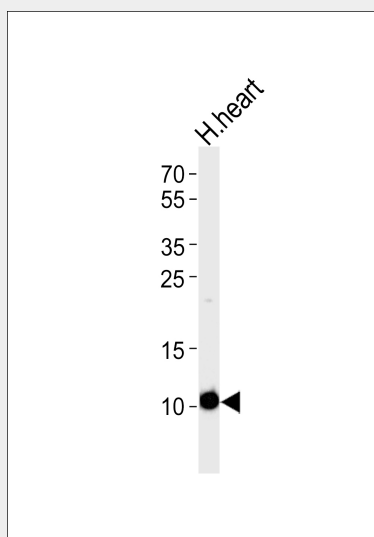
Mitochondrion. Mitochondrion inner membrane.

ATP5I Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATP5I Antibody - Images



Western blot analysis of lysate from human heart tissue lysate, using ATP5I Antibody (AP50736). AP50736 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

ATP5I Antibody - 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 - References

Fujiwara T.,et al.Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.
Kalnina 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).