

ATP5E Antibody (C-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21888b**Specification**

ATP5E Antibody (C-Term) - Product Information

Application	WB,E
Primary Accession	P56381
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	5780

ATP5E Antibody (C-Term) - Additional Information**Gene ID** 514**Other Names**

ATP synthase subunit epsilon, mitochondrial, ATPase subunit epsilon, ATP5E

Target/Specificity

This ATP5E antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 21-51 amino acids from human ATP5E.

Dilution

WB~~1:2000

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

ATP5E Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5E Antibody (C-Term) - Protein Information**Name** ATP5F1E ([HGNC:838](#))

Function Subunit epsilon, 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). May be essential for the assembly of F(1) and may play an important role in the incorporation of the hydrophobic subunit c into the F(1)-c oligomer rotor of the mitochondrial ATP synthase complex (PubMed:[20026007](#)).

Cellular Location

Mitochondrion. Mitochondrion inner membrane.

Tissue Location

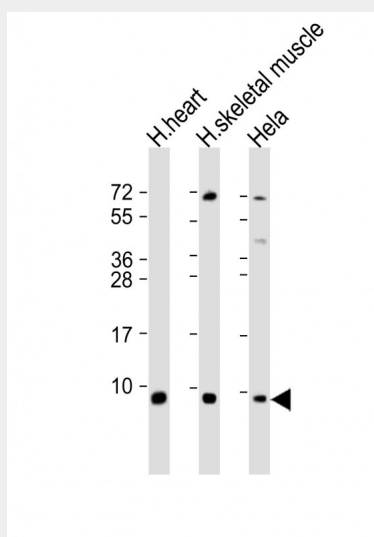
Ubiquitous.

ATP5E 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 Cytometry](#)
- [Cell Culture](#)

ATP5E Antibody (C-Term) - Images



All lanes : Anti-ATP5E Antibody (C-Term) at 1:2000 dilution Lane 1: human heart lysate Lane 2: human skeletal muscle lysate Lane 3: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 6 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ATP5E 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(1) domain and of the central stalk which is part of the complex rotary element. Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits (By similarity).

ATP5E Antibody (C-Term) - References

Tu Q.,et al.Biochem. J. 347:17-21(2000).
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Deloukas P.,et al.Nature 414:865-871(2001).