

ATP5D Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16838B

Specification

ATP5D Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P30049
Other Accession	NP_001678.1 , NP_001001975.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17490
Antigen Region	128-157

ATP5D Antibody (C-term) - Additional Information

Gene ID 513

Other Names

ATP synthase subunit delta, mitochondrial, F-ATPase delta subunit, ATP5D

Target/Specificity

This ATP5D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 128-157 amino acids from the C-terminal region of human ATP5D.

Dilution

WB~~1:1000

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

ATP5D Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP5D Antibody (C-term) - Protein Information

Name ATP5F1D ([HGNC:837](#))

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 (PubMed:[29478781](#)). 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 turnover 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 (PubMed:[1531933](#)).

Cellular Location

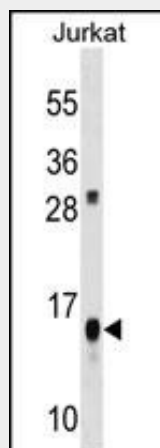
Mitochondrion. Mitochondrion inner membrane.

ATP5D 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](#)

ATP5D Antibody (C-term) - Images



ATP5D Antibody (C-term) (Cat. #AP16838b) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the ATP5D antibody detected the ATP5D protein (arrow).

ATP5D Antibody (C-term) - Background

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon)

assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the delta subunit of the catalytic core. Alternatively spliced transcript variants encoding the same isoform have been identified.

ATP5D Antibody (C-term) - References

Grimwood, J., et al. Nature 428(6982):529-535(2004)
Itoh, H., et al. Nature 427(6973):465-468(2004)
Cross, R.L. Nature 427(6973):407-408(2004)
Hong, S., et al. J. Bioenerg. Biomembr. 35(2):95-120(2003)
Medeiros, D.M., et al. J. Bioenerg. Biomembr. 34(5):389-395(2002)