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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
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
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 Subunit delta, 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 (Probable) (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). With the central stalk subunit gamma, is essential for the biogenesis of F(1) catalytic part of the ATP synthase complex namely in the formation of F1 assembly intermediate (PubMed:29499186).

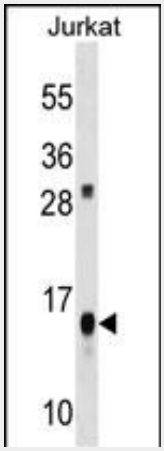
Cellular Location
Mitochondrion. Mitochondrion inner membrane.

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 Cytomety
- 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)
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Cross, R.L. Nature 427(6973):407-408(2004)
Hong, S., et al. J. Bioenerg. Biomembr. 35(2):95-120(2003)
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