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**Product Name: ATP5D Rabbit Polyclonal Antibody****Catalog #: APRab07327**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

**Dilution Ratio** IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000

**Molecular Weight**

**Antigen Information**

<b>Gene Name</b>	ATP5D
<b>Alternative Names</b>	ATP5D; ATP synthase subunit delta; mitochondrial; F-ATPase delta subunit
<b>Gene ID</b>	513.0
<b>SwissProt ID</b>	P30049
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ATP5D. AA range:61-110

**Background**

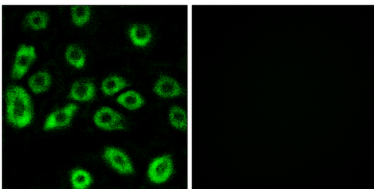
This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an

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, F<sub>1</sub>, and the membrane-spanning component, F<sub>0</sub>, 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. [provided by RefSeq, Jul 2008],function:Mitochondrial membrane ATP synthase (F<sub>1</sub>)F<sub>0</sub> 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 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.,similarity:Belongs to the ATPase epsilon chain family.,subunit:F-type ATPases have 2 components, CF(1) - the catalytic core - and CF(0) - the membrane proton channel. CF(1) has five subunits: alpha(3), beta(3), gamma(1), delta(1), epsilon(1). CF(0) seems to have nine subunits: a, b, c, d, e, f, g, F6 and 8 (or A6L),.

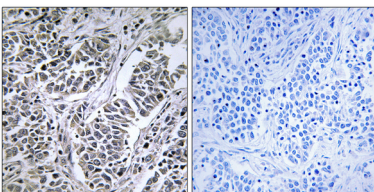
## Research Area

Oxidative phosphorylation;Alzheimer's disease;Parkinson's disease;Huntington's disease;

## Image Data



Immunofluorescence analysis of A549 cells, using ATP5D Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using ATP5D Antibody. The picture on the right is blocked with the synthesized peptide.