

ATP5C1 Polyclonal Antibody

Catalog No: YT0400

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: ATP5C1

Fields: >>Oxidative phosphorylation;>>Metabolic

pathways;>>Thermogenesis;>>Alzheimer disease;>>Parkinson

disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Diabetic cardiomyopathy

Gene Name: ATP5C1

Protein Name: ATP synthase subunit gamma mitochondrial

P36542

Q91VR2

Human Gene Id: 509

Human Swiss Prot

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No:

Mouse Gene Id: 11949

Mouse Swiss Prot

No:

Rat Swiss Prot No: P35435

Immunogen: The antiserum was produced against synthesized peptide derived from human

ATP5C1. AA range:131-180

Specificity: ATP5C1 Polyclonal Antibody detects endogenous levels of ATP5C1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 33kD

Cell Pathway: Oxidative phosphorylation; Alzheimer's disease; Parkinson's disease; Huntington's

disease;

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 gamma subunit of the catalytic core. Alternatively spliced transcript variants encoding different isoforms have been identified. This gene also has a

pseudogene on

Function: 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. 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 the central stalk which is part of the complex rotary element. The gamma subunit protrudes into the catalytic domain formed of

alpha(3)beta(3). Rotation of the central stalk against the surrounding

alpha(3)beta(3) subunits leads to hydrolysis of ATP in three

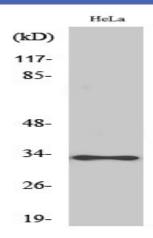
Subcellular Location : Mitochondrion inner membrane; Peripheral membrane protein; Matrix side.

Expression:

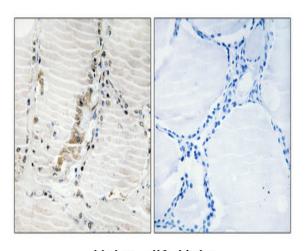
Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine,

stomach and aorta.

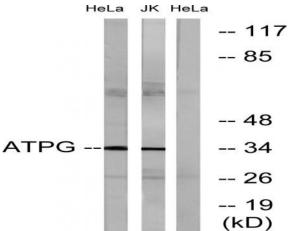
Products Images



Western Blot analysis of various cells using ATP5C1 Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human thyroid gland. Antibody was diluted at 1:100(4° overnight). Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was preabsorbed by immunogen peptide.



Western blot analysis of lysates from HeLa cells and Jurkat cells, using ATPG Antibody. The lane on the right is blocked with the synthesized peptide.