

ATP5G3 Polyclonal Antibody

Catalog No: YT0405

Reactivity: Human;Rat

Applications: IHC;IF;ELISA

Target: ATP5G3

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: ATP5G3

Protein Name: ATP synthase lipid-binding protein mitochondrial

P48201

P56384

Human Gene Id: 518

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Rat Gene Id: 114630

Rat Swiss Prot No: Q71S46

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

ATP5G3. AA range:1-50

Specificity: ATP5G3 Polyclonal Antibody detects endogenous levels of ATP5G3 protein.

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

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in other

1/3



applications.

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)

Molecularweight: 15kD

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 seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the

identi

Function: disease: This protein is the major protein stored in the storage bodies of animals

or humans affected with ceroid lipofuscinosis (Batten

disease).,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(0) domain. A homomeric c-ring of probably 10 subunits is part of the complex rotary element., miscellaneous: There are three

gene

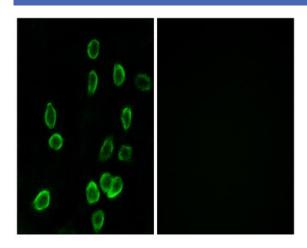
Subcellular Location:

Mitochondrion membrane; Multi-pass membrane protein.

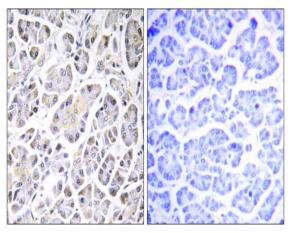
Expression: Liver, Subthalamic nucleus,



Products Images



Immunofluorescence analysis of A549 cells, using ATP5G3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human pancreas tissue, using ATP5G3 Antibody. The picture on the right is blocked with the synthesized peptide.