

Summary

Production Name	ATP5G2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ATP5G2
Alternative Names	ATP5G2; PSEC0033; ATP synthase lipid-binding protein; mitochondrial; ATP synthase proteolipid P2; ATPase protein 9; ATPase subunit c
Gene ID	517.0
SwissProt ID	Q06055.The antiserum was produced against synthesized peptide derived from human ATP5G2. AA range:1-50

Application

Dilution Ratio	IHC 1:100-1:300 ELISA: 1:40000
Molecular Weight	

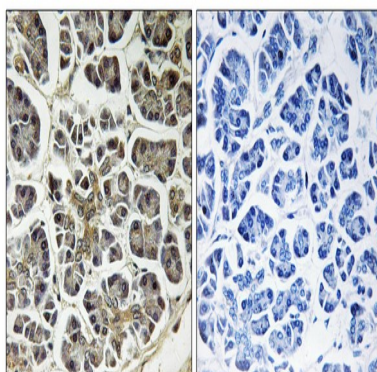
Background

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, F₀, 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 single representatives of the gamma, delta, and epsilon subunits. The proton channel likely has nine subunits (a, b, c, d, e, f, g, F₆ and 8). There are three separate genes which encode subunit c of the proton channel and they specify precursors with different import sequences but identical mature proteins. This protein is the major protein stored in the storage bodies of animals or humans affected with ceroid lipofuscinosis (Batten disease). Mitochondrial membrane ATP synthase (F₁F₀ 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. There are three genes which encode the mitochondrial ATP synthase proteolipid and they specify precursors with different import sequences but identical mature proteins. Belongs to the ATPase C chain family. 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) has three main subunits: a, b and c.

Research Area

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

Image Data



Immunohistochemistry analysis of paraffin-embedded human pancreas, using ATP5G2 Antibody. The picture on the right is blocked with the synthesized peptide.

Product Name: ATP5G2 Rabbit Polyclonal Antibody
Catalog #: APRab07332



Note

For research use only.