ARG58368
anti-ATP5C1 / ATPG antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ATP5C1 / ATPG
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATP5C1 / ATPG
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 26-298 of Human ATP5C1 (NP_001001973.1).
Conjugation	Un-conjugated
Alternate Names	ATP5C; F-ATPase gamma subunit; ATP synthase subunit gamma, mitochondrial; ATP5CL1; ATPG

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: LO2

Observed Size: 36 kDa

Properties

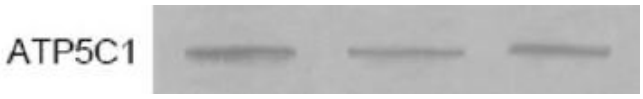
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ATP5C1
Gene Full Name	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma polypeptide 1
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 chromosome 14. [provided by RefSeq, Jul 2008]
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 separate catalytic sites on the beta subunits. [UniProt]
Calculated Mw	33 kDa
Cellular Localization	Mitochondrion, Mitochondrion inner membrane, Peripheral membrane protein. [UniProt]

Images



ARG58368 anti-ATP5C1 / ATPG antibody WB image

Western blot: Rat substantia nigra stained with ARG58368 anti-ATP5C1 / ATPG antibody.

From Zhang T et al. Aging (Albany NY)- (2020), doi: 10.18632/aging.103265, Fig. 3. F.

ARG58368 anti-ATP5C1 / ATPG antibody WB image

Western blot: 25 µg of LO2 cell lysate stained with ARG58368 anti-ATP5C1 / ATPG antibody at 1:1000 dilution.