ARG58323
anti-ATP5C1 / ATPG antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes ATP5C1 / ATPG
Tested Reactivity	Hu, Rat
Predict Reactivity	Ms, Cow, Dog
Tested Application	IHC-P, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	ATP5C1 / ATPG
Species	Human
Immunogen	Synthetic peptide from the C-terminus of Human ATP5C1 / ATPG (NP_005165.1; NP_001001973.1). (C-TLTFNRTRQAVITKE)
Conjugation	Un-conjugated
Alternate Names	ATP5C1; ATPG; ATP5C; F-ATPase gamma subunit; ATP synthase subunit gamma, mitochondrial; ATP5CL1

Application Instructions

Application table

Application	Dilution
IHC-P	5 µg/ml
WB	0.01 - 0.03 µg/ml

Application Note: IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).
WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 33 kDa

Properties

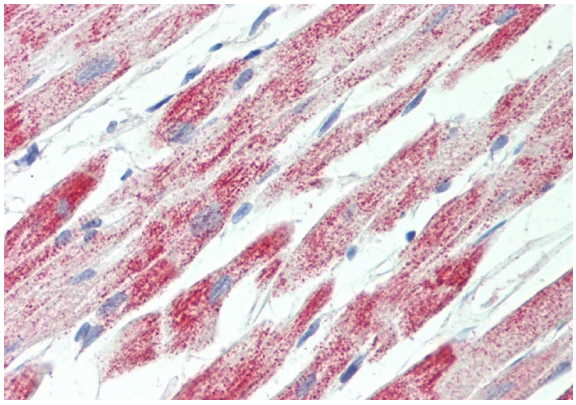
Form	Liquid
Purification	Ammonium sulphate precipitation followed by affinity purification with immunogen.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml

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 or below. 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

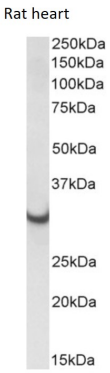
Gene Symbol	ATP5C1
Gene Full Name	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma polypeptide 1
Background	This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane 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

Images



ARG58323 anti-ATP5C1 / ATPG antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart stained with ARG58323 anti-ATP5C1 / ATPG antibody at 5 µg/ml dilution. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).



ARG58323 anti-ATP5C1 / ATPG antibody WB image

Western blot: 35µg of Rat heart lysate (in RIPA buffer) stained with ARG58323 anti-ATP5C1 / ATPG antibody at 0.01 µg/ml dilution. Primary incubation was 1 hour. Detected by chemiluminescence.