

Product Name: KD-Validated ATP5C1 Mouse Monoclonal Antibody**Catalog #: KVA00583**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:100-1:1,000; ICC 1:100-1:500
Molecular Weight	Calculated MW: 33.0kDa

Antigen Information

Gene Name	ATP5F1C
Alternative Names	ATP5F1C; ATP Synthase F1 Subunit Gamma; ATP5CL1; ATP5C1; ATP5C; ATP Synthase, H+ Transporting, Mitochondrial F1 Complex, Gamma Polypeptide 1; ATP Synthase Subunit Gamma, Mitochondrial; F-ATPase Gamma Subunit; Mitochondrial ATP Synthase, Gamma Subunit 1; ATP Synthase Gamma Chain, Mitochondrial
Gene ID	509.0
SwissProt ID	P36542
Immunogen	Recombinant protein of human ATP5C1

Background

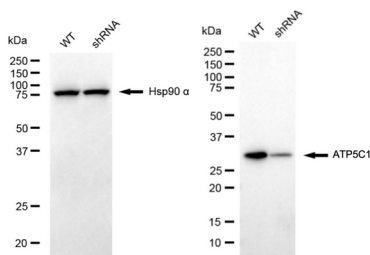
This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an

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]

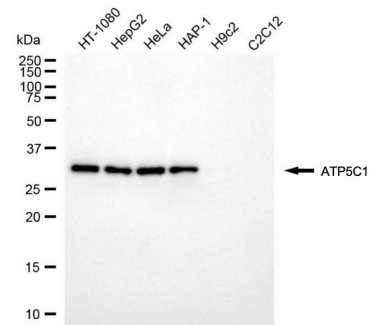
Research Area

Neuroscience, Signal Transduction, Cancer

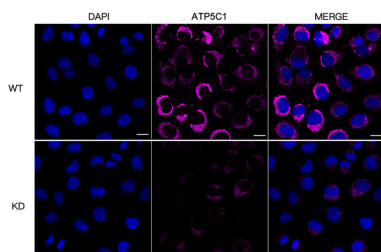
Image Data



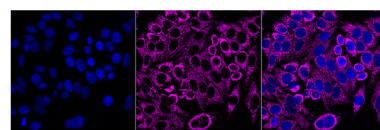
Western blotting analysis using ATP5C1 antibody (KVA00583). ATP5C1 expression in wild type (WT) and ATP5C1(ATP5F1C) shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATP5C1 antibody (KVA00583, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



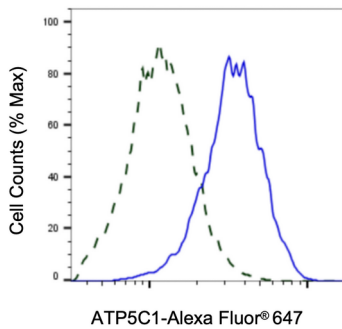
Western blotting analysis using ATP5C1 antibody (KVA00583). Total cell lysates (10 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATP5C1 antibody (KVA00583, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



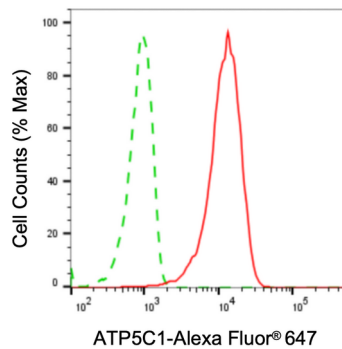
Immunocytochemical staining of HT-1080 cells using ATP5C1 antibody (KVA00583, 1:1,000). Top panel: wild-type (WT); Bottom panel: ATP5C1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ATP5C1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HepG2 cells with ATP5C1 antibody (KVA00583, 1:500). Nuclei were stained blue with DAPI; ATP5C1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of ATP5C1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with ATP5C1 antibody (KVA00583, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ATP5C1 expression in HepG2 cells using ATP5C1 antibody (KVA00583, 1:1,000). Green, isotype control; red, ATP5C1.