10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2016

Specification

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	P36542
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 33 kDa, observed, 33 kDa KDa**
Gene Name	**ATP5F1C**
Aliases	**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**
Immunogen	**Recombinant protein of human ATP5C1**

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody - Additional Information

Gene ID	**509**

Other Names
ATP synthase F(1) complex subunit gamma, mitochondrial, ATP synthase F1 subunit gamma {ECO:0000312|HGNC:HGNC:833}, F-ATPase gamma subunit, ATP5F1C (HGNC:833)

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody - Protein Information

Name ATP5F1C (HGNC:833)

Function
Subunit gamma, of the mitochondrial membrane ATP synthase complex (F(1)F(0) ATP synthase or Complex V) that 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 (PubMed:37244256). ATP synthase complex consist of a soluble F(1) head domain - the catalytic core - and a membrane F(1) domain - the membrane proton channel (PubMed:37244256). These two domains are linked by a central stalk rotating inside the F(1) region and a stationary peripheral stalk (PubMed:37244256). 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 (Probable). In

vivo, can only synthesize ATP although its ATP hydrolase activity can be activated artificially in vitro (By similarity). With the central stalk subunit delta, is essential for the biogenesis of F(1) catalytic part of the ATP synthase complex namely in the formation of F1 assembly intermediate (PubMed:29499186).

Cellular Location
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P05631}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05631}; Matrix side {ECO:0000250|UniProtKB:P05631}

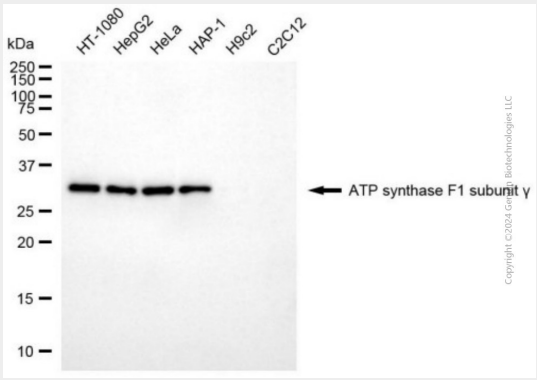
Tissue Location
Isoform Heart is expressed specifically in the heart and skeletal muscle, which require rapid energy supply. Isoform Liver is expressed in the brain, liver and kidney. Isoform Heart and Isoform Liver are expressed in the skin, intestine, stomach and aorta

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ATP5C1 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-ATP synthase F1 subunit gamma antibody (Cat#AGI2016). Total cell lysates (10 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ATP synthase F1 subunit gamma antibody (Cat#AGI2016, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.

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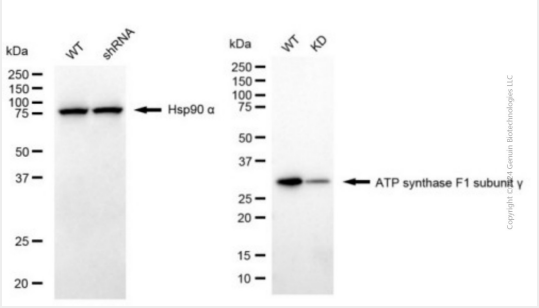
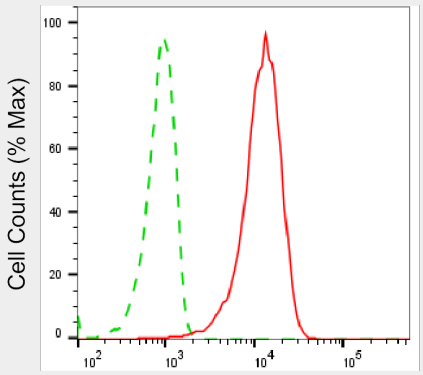


Western blotting analysis using anti-ATP synthase F1 subunit gamma antibody (Cat#AGI2016). ATP synthase F1 subunit gamma expression in wild type (WT) and ATP synthase F1 subunit gamma (ATP5F1C) shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ATP synthase F1 subunit gamma antibody (Cat#AGI2016, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Flow cytometric analysis of ATP synthase F1 subunit gamma expression in HepG2 cells using anti-ATP synthase F1 subunit gamma antibody (Cat#AGI2016, 1:1,000). Green, isotype control; red, ATP synthase F1 subunit gamma.