ATP5H Monoclonal Antibody (7F9BG1)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Human, Mouse, Non-human primate, Rat
Published Species	Human
Host/Isotype	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	7F9BG1
Conjugate	Unconjugated
Immunogen	Bovine Complex V
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	HEPES buffered saline
Contains	0.02% sodium azide
Storage conditions	4° C, do not freeze
RRID	AB_2532222

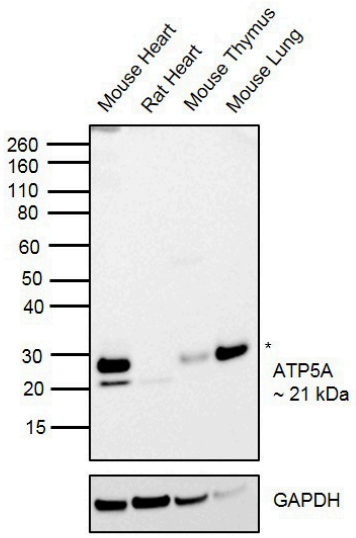
Applications	Tested Dilution	Publications
Western Blot (WB)	1.0 µg/mL	3 Publications
Immunocytochemistry (ICC/IF)	1-5 µg/mL	2 Publications
Flow Cytometry (Flow)	1 µg/mL	-

Product Specific Information

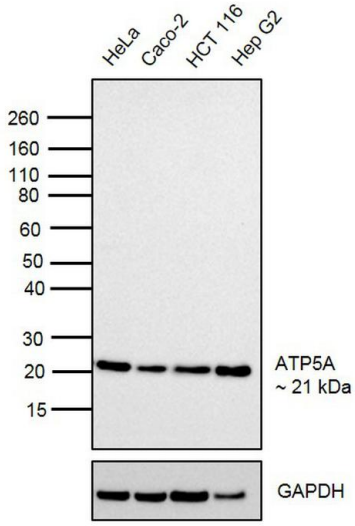
For mouse and rat samples, this antibody will only recognize ATP5H in purified mitochondrial samples. Mouse and rat cell lysates and tissue homogenates are not recommended with this antibody.

For positive control, use Isolated mitochondria from Human heart, Bovine heart, Rat heart, Mouse heart, and HepG2, Cultured Human embryonic lung-derived fibroblasts (strain MRC5), HeLa cells.

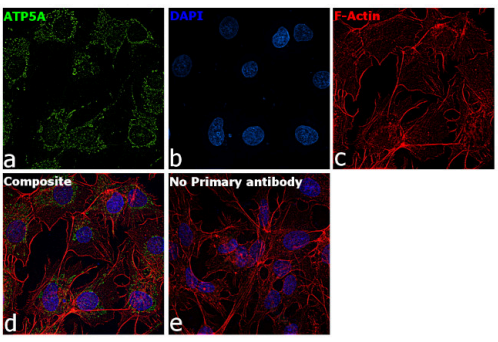
Product Images For ATP5H Monoclonal Antibody (7F9BG1)



ATP5H Antibody (459000)
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues tested owing to their inherent genetic constitution. Relative expression of ATP5H was observed in Mouse Heart (Lane 5) that expresses ATP5H protein at very high levels, in comparison to, Mouse Thymus (Lane 7) that expresses ATP5H protein at low levels using Anti-ATP5H Mouse Monoclonal Antibody (Product # 459000) in Western Blot. {RE}



ATP5H Antibody (459000) in WB
Western blot was performed using Anti-ATP5H Mouse Monoclonal Antibody (Product # 459000) and a 21 kDa band corresponding to an isoform of ATP5H was observed in cell lines tested. Membrane enriched extracts (30 µg lysate) of HeLa (Lane 1), Caco-2 (Lane 2), HCT 116 (Lane 3) and Hep G2 (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). A 25 kDa band (*) corresponding to tissue IgG was observed in mouse tissues.



ATP5H Antibody (459000) in ICC/IF
Immunofluorescence analysis of ATP5H was performed using Hep G2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with ATP5H Mouse Monoclonal Antibody (Product # 459000) at 5 µg/mL in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723) at a dilution of 1: 2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the composite image showing mitochondrial pattern of ATP5H. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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5 References

Western Blot (3)

Cell cycle (Georgetown, Tex.)

ATM-mediated mitochondrial damage response triggered by nuclear DNA damage in normal human lung fibroblasts.

"459000 was used in Western Blotting to study the association between nuclear DNA damage and mitochondrial damage following ionizing radiation in normal human lung fibroblasts."

Authors: Shimura T,Sasatani M,Kawai H,Kamiya K,Kobayashi J,Komatsu K,Kunugita N

Year
2019

Species
Human

FEBS letters

Assembly of human mitochondrial ATP synthase through two separate intermediates, F1-c-ring and b-e-g complex.

"459000 was used in western blot to study the assembly process of human mitochondrial ATP synthase"

Authors: Fujikawa M,Sugawara K,Tanabe T,Yoshida M

Year
2015

Species
Human

View more WB references on thermofisher.com

Immunocytochemistry (2)

Nature medicine

Neutrophil extracellular traps enriched in oxidized mitochondrial DNA are interferogenic and contribute to lupus-like disease.

"459000 was used in immunocytochemistry to elucidate enrichment of oxidized mitochondrial DNA in neutrophil extracellular traps contributes to lupus-like disease"

Authors: Lood C,Blanco LP,Purmalek MM,Carmona-Rivera C,De Ravin SS,Smith CK,Malech HL,Ledbetter JA,Elkon KB,Kaplan MJ

Year
2016

Species
Human

Dilution
1:250

Genes to cells : devoted to molecular & cellular mechanisms

Population of ATP synthase molecules in mitochondria is limited by available 6.8-kDa proteolipid protein (MLQ).

"459000 was used in immunocytochemistry to investigate MLQ as a regulator of mitochondrial ATP synthesis."

Authors: Fujikawa M,Ohsakaya S,Sugawara K,Yoshida M

Year
2014

Species
Human

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