

ATP5A1 Rabbit mAb

Catalog No: #49466



Package Size: #49466-1 50ul #49466-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

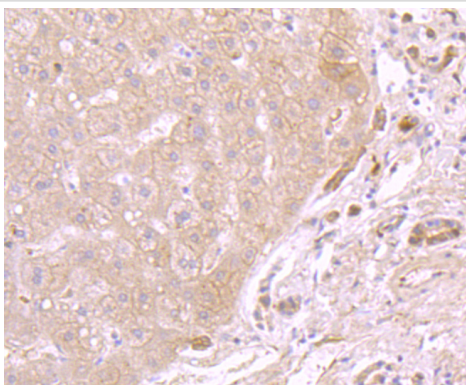
Description

Product Name	ATP5A1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JM110-04
Purification	Affinity-chromatography
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	A synthesized peptide derived from human ATP5A
Conjugates	Unconjugated
Other Names	ATP synthase alpha chain, mitochondrial antibody ATP synthase subunit alpha antibody ATP synthase subunit alpha mitochondrial antibody ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle antibody ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit, 1 antibody ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle antibody ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit, isoform 2, non-cardiac muscle-like 2 antibody ATP sythase (F1 ATPase) alpha subunit antibody ATP5A antibody Atp5a1 antibody ATP5AL2 antibody ATPA_HUMAN antibody ATPM antibody Epididymis secretory sperm binding protein Li 123m antibody hATP1 antibody HEL-S-123m antibody MC5DN4 antibody mitochondrial antibody Mitochondrial ATP synthetase antibody Mitochondrial ATP synthetase oligomycin resistant antibody Modifier of Min 2 mouse homolog antibody Modifier of Min 2, mouse, homolog of antibody MOM2 antibody OMR antibody ORM antibody OTTHUMP00000163475 antibody
Accession No.	Swiss-Prot#:P25705
Calculated MW	50 kDa
Formulation	Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at +4°C for short term. Store at -20°C for long term. Avoid freeze/thaw cycle.

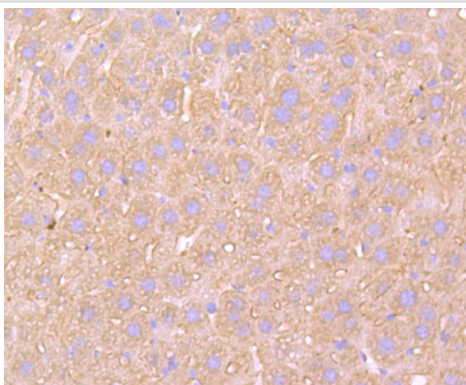
Application Details

WB 1:1000-1:2000 IHC 1:100-1:200 ICC/IF 1:50-1:200 FC 1:20-1:100

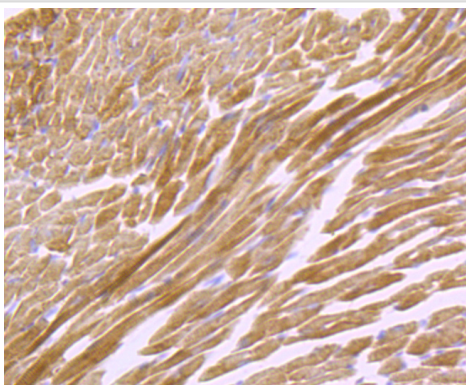
Images



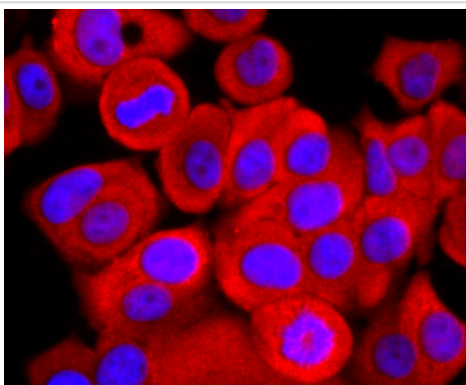
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-ATP5A1 antibody. Counter stained with hematoxylin.



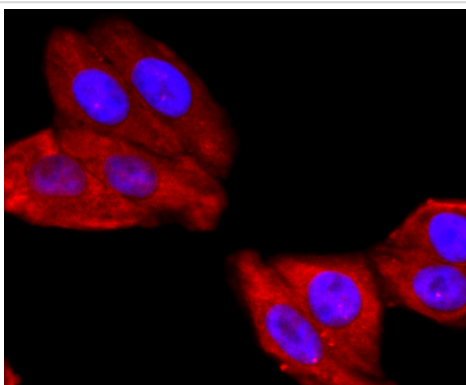
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-ATP5A1 antibody. Counter stained with hematoxylin.



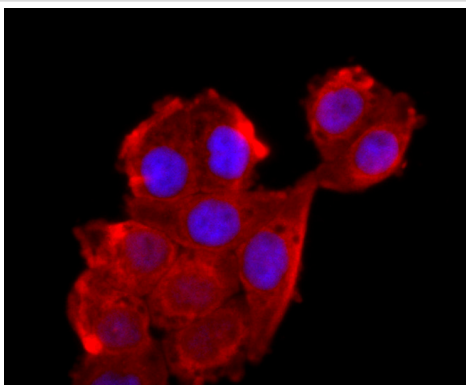
Immunohistochemical analysis of paraffin-embedded mouse heart muscle tissue using anti-ATP5A1 antibody. Counter stained with hematoxylin.



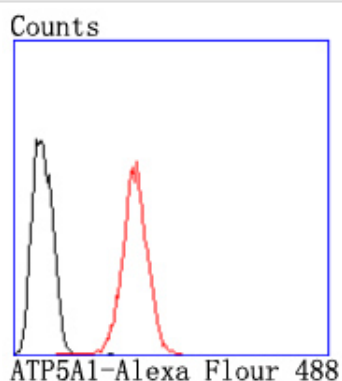
ICC staining ATP5A1 in MCF-7 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



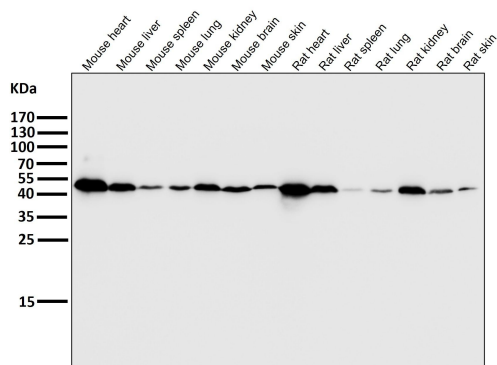
ICC staining ATP5A1 in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



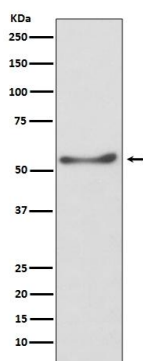
ICC staining ATP5A1 in HeLa cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HeLa cells with ATP5A1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Western blot analysis of ATP5A1 expression in HepG2 cell lysate.

Background

Mitochondrial ATP synthases (ATPases) transduce the energy contained in membrane electrochemical proton gradients into the energy required for synthesis of high-energy phosphate bonds. ATPases contain two linked complexes: F₁, the hydrophilic catalytic core; and F₀, the membrane-embedded protein channel. F₁ consists of three α chains and three β chains, which are weakly homologous, as well as one γ chain, one δ chain and one ϵ chain. F₀ consists of three subunits: a, b and c. The α chain of F₁ is a regulatory subunit that contains 509 amino acids. Mitochondrial ATPase α chain (ATP5A) localizes to the mitochondria and catalyzes ATP synthesis.

References

1. Helman A et al. p16(Ink4a)-induced senescence of pancreatic beta cells enhances insulin secretion. Nat Med N/A:N/A (2016).

2. Sen A & Cox RT Clueless is a conserved ribonucleoprotein that binds the ribosome at the mitochondrial outer membrane. Biol Open 5:195-203 (2016).

Published Papers

Ziyan Huang;Ziyan Huang;Ziyan Huang;Ziyan Huang;Xinzhao Jiang;Xinzhao Jiang;Xinzhao Jiang;Xinzhao Jiang;Lichen Zhang;Lichen Zhang;Lichen Zhang;Lichen Zhang;Wei Wang;Wei Wang;Wei Wang;Wei Wang;Ziang Li;Ziang Li;Ziang Li;Ziang Li;Yiyang Huang;Yiyang Huang;Yiyang Huang;Yiyang Huang;Yichang Xu;Yichang Xu;Yichang Xu;Yichang Xu;Liang Zhou;Liang Zhou;Liang Zhou;Liang Zhou;Jie Wu;Jie Wu;Jie Wu;Jie Wu;Jincheng Tang;Jincheng Tang;Jincheng Tang;Jincheng Tang;Kun Xi;Kun Xi;Kun Xi;Kun Xi;Yu Feng;Yu Feng;Yu Feng;Yu Feng;Liang Chen;Liang Chen;Liang Chen;Liang Chen et al., Multifunctional manganese-based nanogels catalyze immune energy metabolism to promote bone repair, , (2025)

PMID:

Note: This product is for in vitro research use only and is not intended for use in humans or animals.