Nur für Forschungszwecke

ATP5A1 Monoklonaler Antikörper

Katalog-Nr.:66037-1-Ig Vorgestelltes Produkt 20 Publikationen

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Antibodies | ELISA kits | Proteins
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Allgemeine Informationen

Katalog-Nr.:
66037-1-Ig

Größe:
150ul , Konzentration: 1840 μg/ml von498 Nanodrop und 947 μg/ml durch die Bradford-Methode mit BSA als Standard;

Wirt:
Maus

Isotyp:
IgG2b

Immunogen Katalognummer:
AG8119

GenBank-Zugangsnummer:
BC064562

GeneID (NCBI):

Vollständiger Name:
ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle

Berechneté Masse:
60 kDa

Beobachteté Masse:
50 kDa

Reinigungsmethode:
Protein-A-Reinigung

CloneNo.:
1B10H3

Empfohlene Verdünnungen:
WB 1:5000-1:50000
IP 0.5-4.0 ug für IP und 1:500-1:1000 für WB
IHC 1:1000-1:4000
IF 1:150-1:600

Anwendungen

Geprüfte Anwendungen:
FC, IF, IHC, IP, WB, ELISA

In Publikationen genannte Anwendungen:
IF, IHC, WB

Getestete Reaktivität:
Affe, Human, Maus, Ratte

Zitierte Arten:
Human, Maus, Ratte

Hinweis-IHC: Antigendemaskierung mit TE-Puffer pH 9,0 empfohlen. (*) Wahlweise kann die Antigendemaskierung auch mit Citratpuffer pH 6,0 erfolgen.

Positivkontrollen:

WB : MCF-7-Zellen, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, NIH/3T3-Zellen, RAW 264.7-Zellen

IP : Mausherzgewebe,

IHC : humanes Leberkarzinomgewebe, humanes Herzgewebe, humanes Lebergewebe

IF : HepG2-Zellen, HeLa-Zellen

Hintergrundinformationen

The ATP5A1 gene encodes the α subunit of mitochondrial ATP synthase which produces ATP from ADP in the presence of a proton gradient across the membrane. The mitochondrial ATP synthase, also known as Complex V or F1F0 ATP synthase, is a multi-subunit enzyme complex consisting of two functional domains, the F1-containing the catalytic core and the Fo- containing the membrane proton channel. F0 domain has 10 subunits: a, b, c, d, e, f, g, OSCP, A6L, and F6. F1 is composed of subunits α, β, γ , δ, ε, and a loosely attached inhibitor protein IF1. Recently defect in ATP5A1 has been linked to the fatal neonatal mitochondrial encephalopathy. ATP5A1 is localized in the mitochondria and anti-ATP5A1 can be used as the loading control for mitochondrial or Complex V proteins. This antibody recognizes the endogenous ATP5A1 protein in lysates from various cell lines and tissues. The predicted MW of ATP5A1 is 60 kDa, while it undergoes the transit peptide cleavage to become a mature form around 50-55 kDa. Several isoforms of ATP5A1 exist due to the alternative splicing.

Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Han Liu	36106364	Adv Sci (Weinh)	IF
Meng Ding	35709007	Diabetes	WB
Jia Xu	36269134	Acta Biochim Biophys Sin (Shanghai)	WB

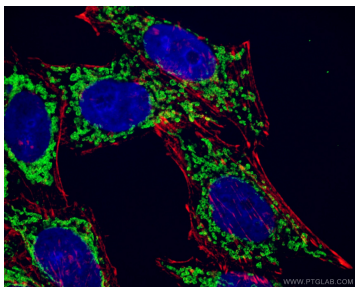
Lagerung

Lagerungsbedingungen:
Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil
Lagerungspuffer:
PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.
Aliquotieren ist nicht notwendig bei -20°C lagerung

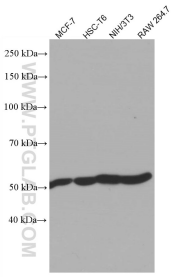
***** 20ul-Größen enthalten 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

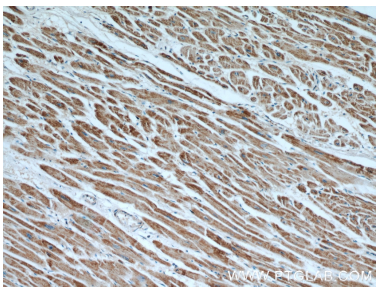
Ausgewählte Validierungsdaten



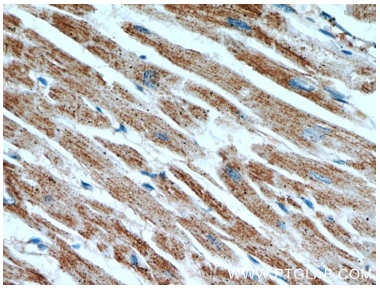
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66037-1-Ig (ATP5A1 antibody) at dilution of 1:300 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). Red: CL555-phalloidin staining of F-actin. .



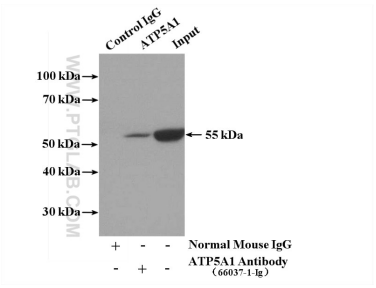
Various lysates were subjected to SDS PAGE followed by western blot with 66037-1-Ig (ATP5A1 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours.



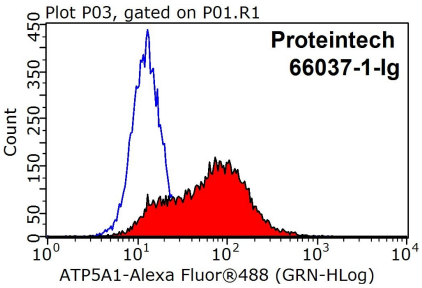
Immunohistochemical analysis of paraffin-embedded human heart using 66037-1-Ig(ATP5A1 antibody) at dilution of 1:50 (under 10x lens).



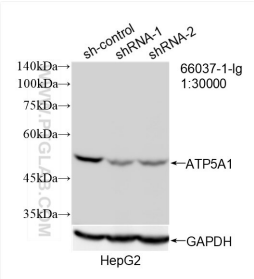
Immunohistochemical analysis of paraffin-embedded human heart using 66037-1-Ig(ATP5A1 antibody) at dilution of 1:50 (under 40x lens).



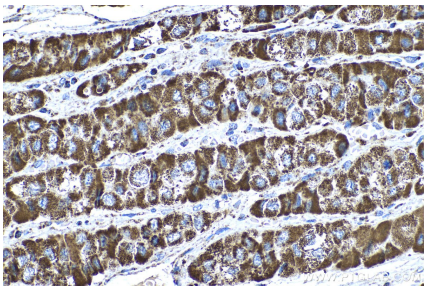
IP Result of anti-ATP5A1 (IP:66037-1-Ig, 5ug; Detection:66037-1-Ig 1:500) with mouse heart tissue lysate 4000ug.



1X10^6 HeLa cells were stained with 0.2 ug Anti-Human ATP5A1 (66037-1-Ig, Clone:1B10H3) and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or stained with 0.2 ug isotype control and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (blue). Cells were fixed with 90% MeOH.



WB result of ATP5A1 antibody (66037-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ATP5A1 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66037-1-Ig (ATP5A1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).