

À des fins de recherche uniquement

# Anticorps Monoclonal anti-ATP5A1

Numéro de catalogue: 66037-1-Ig

Phare

20 Publications



## Informations de base

Numéro de catalogue:

66037-1-Ig

Numéro d'acquisition GenBank:

BC064562

Méthode de purification:

Purification par protéine A

Taille:

150ul, Concentration: 1840 µg/ml by Nanodrop and 947 µg/ml by Bradford method using BSA as the standard;

Identification du gène (NCBI):

498

CloneNo.:

1B10H3

Hôte:

Mouse

Nom complet:

ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle

Dilutions recommandées:

WB 1:5000-1:50000  
IP 0.5-4.0 µg for IP and 1:500-1:1000 for WB

Isotype:

IgG2b

MW calculé

60 kDa

IHC 1:1000-1:4000

IF 1:150-1:600

Immunogen Catalog Number:

AG8119

MW observés:

50 kDa

## Applications

Applications testées:

FC, IF, IHC, IP, WB, ELISA

Demandes citées:

IF, IHC, WB

Spécificité de l'espèce:

Humain, rat, singe, souris

Espèces citées:

Humain, rat, souris

**Remarque-IHC: il est suggéré de démasquer l'antigène avec un tampon de TE buffer pH 9,0; (\*) A défaut, 'le démasquage de l'antigène peut être 'effectué avec un tampon citrate pH 6,0.**

Contrôles positifs:

WB : cellules MCF-7, cellules HEK-293, cellules HeLa, cellules HepG2, cellules HSC-T6, cellules NIH/3T3, cellules RAW 264.7

IP : tissu cardiaque de souris,

IHC : tissu de cancer du foie humain, tissu cardiaque humain, tissu hépatique humain

IF : cellules HepG2, cellules HeLa

## Informations générales

The ATP5A1 gene encodes the  $\alpha$  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 F<sub>1</sub>F<sub>0</sub> ATP synthase, is a multi-subunit enzyme complex consisting of two functional domains, the F<sub>1</sub>-containing the catalytic core and the F<sub>0</sub>-containing the membrane proton channel. F<sub>0</sub> domain has 10 subunits: a, b, c, d, e, f, g, OSCP, A6L, and F6. F<sub>1</sub> is composed of subunits  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$ , 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.

## Publications notables

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

## Stockage

Stockage:

Stocker à -20°C. Stable pendant un an après l'expédition.

Tampon de stockage:

PBS avec azoture de sodium à 0,02 % et glycérol à 50 % pH 7,3

L'aliquotage n'est pas nécessaire pour le stockage à -20C

\*\*\* Les 20ul contiennent 0,1% de BSA.

For technical support and original validation data for this product please contact:

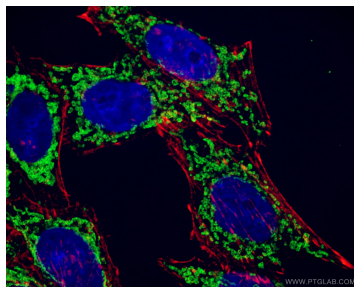
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com

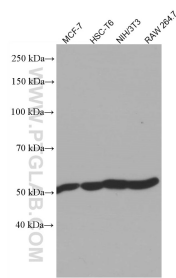
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

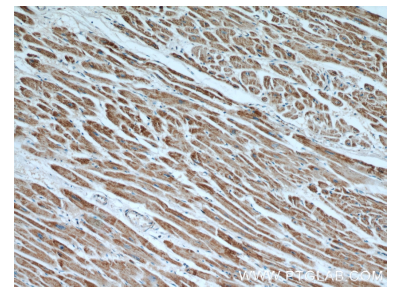
## Données de validation sélectionnées



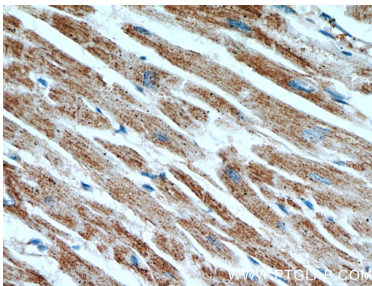
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66037-1-Ig (ATP5A1 antibody) at dilution of 1:300 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). Red: CL555-phalloidin staining of F-actin.



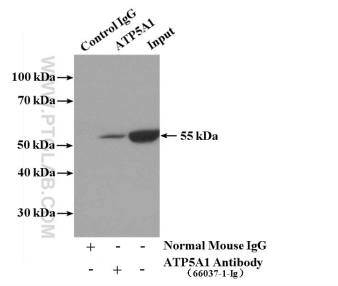
Various lysates were subjected to SDS PAGE followed by western blot with 66037-1-Ig (ATP5A1 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours.



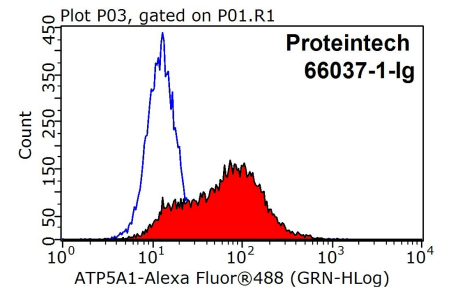
Immunohistochemical analysis of paraffin-embedded human heart using 66037-1-Ig(ATP5A1 antibody) at dilution of 1:50 (under 10x lens).



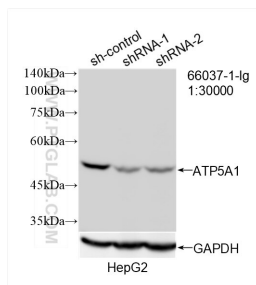
Immunohistochemical analysis of paraffin-embedded human heart using 66037-1-Ig(ATP5A1 antibody) at dilution of 1:50 (under 40x lens).



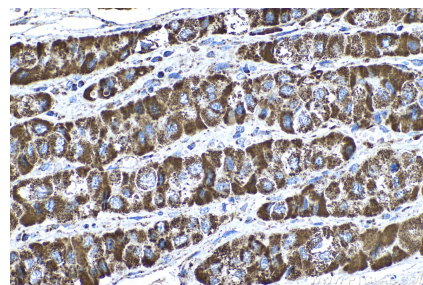
IP Result of anti-ATP5A1 (IP:66037-1-Ig, 5ug; Detection:66037-1-Ig 1:500) with mouse heart tissue lysate 4000ug.



1X10<sup>6</sup> 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).