

## ATPB (PT0169R) PT™ Rabbit mAb

CatalogNo: YM8103

Recombinant KD/KO Validated 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, IP, ELISA

#### MW

- 57kD (Calculated)
- 52kD (Observed)

#### Isotype

- IgG, Kappa

### Storage

#### Storage\*

-15°C to -25°C/1 year (Do not lower than -25°C)

#### Formulation

PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

### Recommended Dilution Ratios

IHC 1:200-1:1000

WB 1:1000-1:5000

IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200,

### Basic Information

#### Clonality

Monoclonal

#### Clone Number

PT0169R

### Immunogen Information

#### Specificity

Endogenous

## Target Information

**Gene name** ATP5B ATPMB ATPSB

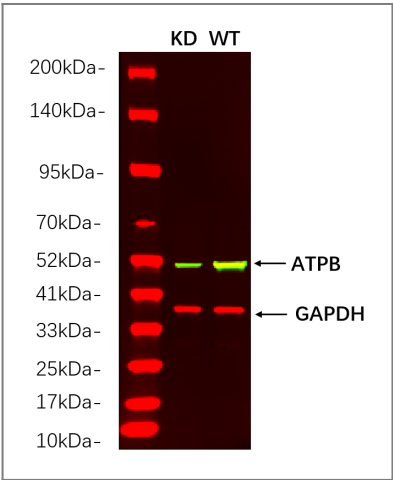
**Protein Name** ATP synthase subunit beta, mitochondrial (EC 3.6.3.14)

Organism	Gene ID	UniProt ID
Human	<a href="#">506;</a>	<a href="#">P06576;</a>
Mouse	<a href="#">11947;</a>	<a href="#">P56480;</a>
Rat	<a href="#">171374;</a>	<a href="#">P10719;</a>

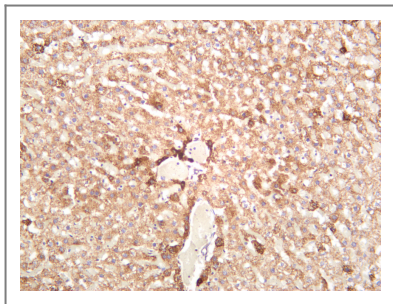
**Cellular Localization** Mitochondrion inner membrane

**Function** Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) 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. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. 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. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.

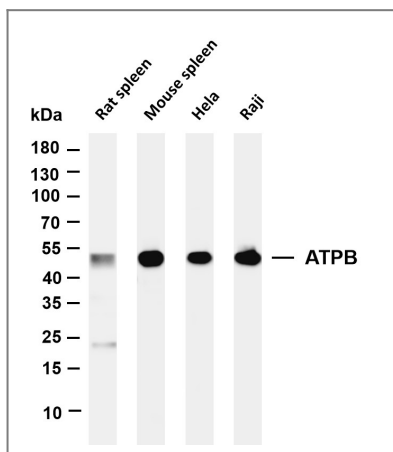
## Validation Data



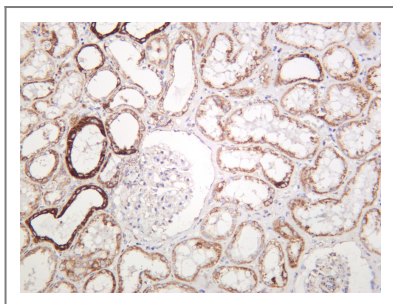
Western blot analysis of lysates from HAP1 WT and knockdown cell. (Green) primary antibody was diluted at 1:5000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) (Immunoway:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody(Immunoway:RS23710)was diluted at 1:10000, 37° 1hour.



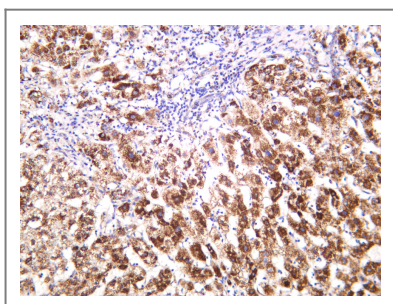
Rat liver was stained with anti-ATPB rabbit antibody



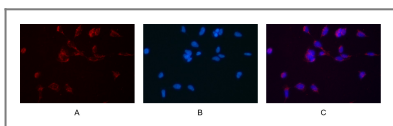
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ATPB antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat spleen Lane 2: Mouse spleen Lane 3: HeLa Lane 4: Raji Predicted band size: 57kDa Observed band size: 52kDa



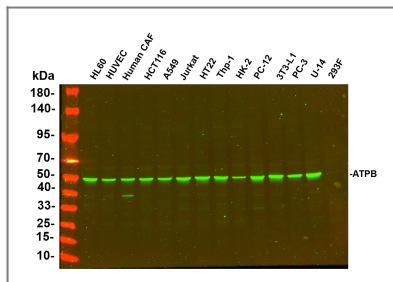
Human kidney was stained with anti-ATPB rabbit antibody



Human liver was stained with anti-ATPB rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: ATPB antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:2500 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody (Cat:RS23920) was used to detect the antibody. Lane1: HL60 - Human promyelocytic leukemia cell Lane2: HUVEC - Human umbilical vein endothelial cell Lane3: Human CAF - Human cancer-associated fibroblast Lane4: HCT116 - Human colorectal carcinoma Lane5: A549 - Human lung carcinoma Lane6: Jurkat - Human T lymphocyte leukemia Lane7: HT22 - Mouse hippocampal neuronal Lane8: Thp-1 - Human monocytic leukemia Lane9: HK-2 - Human proximal tubular epithelial Lane10: PC-12 - Rat adrenal pheochromocytoma Lane11: 3T3-L1 - Mouse embryonic fibroblast Lane12: PC-3 - Human prostate adenocarcinoma Lane13: U-14 - Mouse cervical carcinoma Lane14: 293F - HEK293 derivative, adapted for suspension culture Predicted band size: 52kDa Observed band size: 52kDa

## Contact information

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**ATPB (PT0169R)**  
**PT™ Rabbit mAb**

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