

## Product datasheet for **CF500849**

### ATP5F1B Mouse Monoclonal Antibody [Clone ID: OTI7F4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI7F4
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB 1:1000, IHC 1:50, IF 1:100, Flow 1:100
Reactivity:	Human, Dog, Monkey
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human ATP5B (NP_001677) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	56.6 kDa
Gene Name:	ATP synthase F1 subunit beta
Database Link:	<a href="#">NP_001677</a> <a href="#">Entrez Gene 403669 Dog</a> <a href="#">Entrez Gene 713284 Monkey</a> <a href="#">Entrez Gene 506 Human</a> <a href="#">P06576</a>



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**Background:**

This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F<sub>1</sub>, and the membrane-spanning component, F<sub>o</sub>, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the beta subunit of the catalytic core.

**Synonyms:**

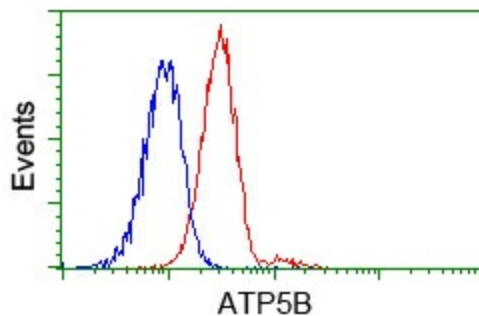
ATPMB; ATPSB; HEL-S-271

**Protein Families:**

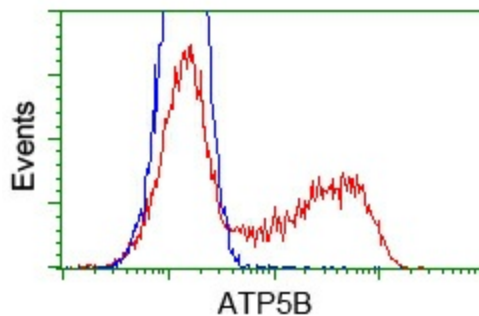
Druggable Genome

**Protein Pathways:**

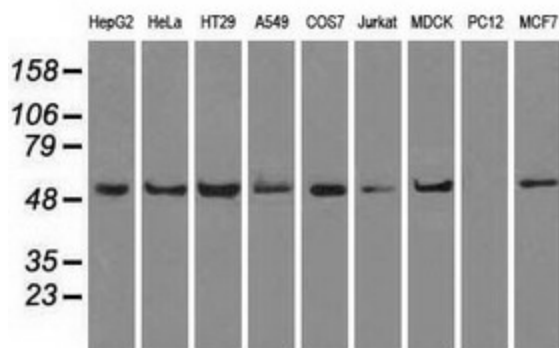
Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

**Product images:**


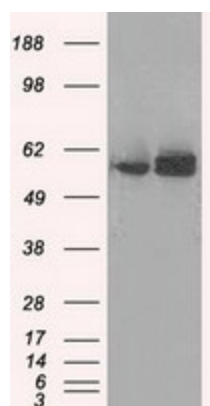
Flow cytometric analysis of Jurkat cells, using anti-ATP5B antibody ([TA500849]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).



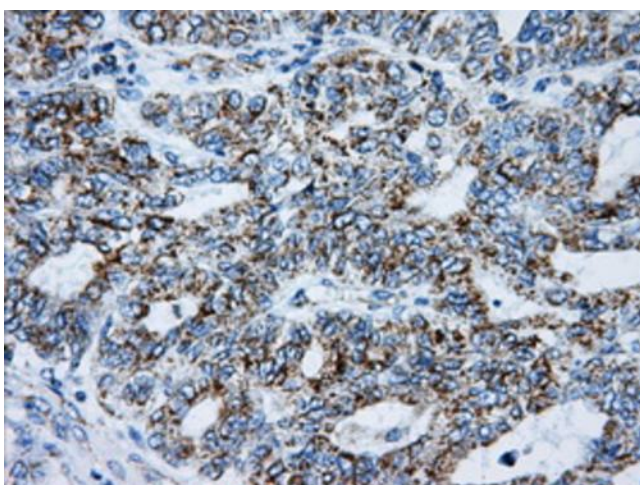
HEK293T cells transfected with either pCMV6-ENTRY ATP5B ([RC201638]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-ATP5B mouse monoclonal ([TA500849]), and then analyzed by flow cytometry.



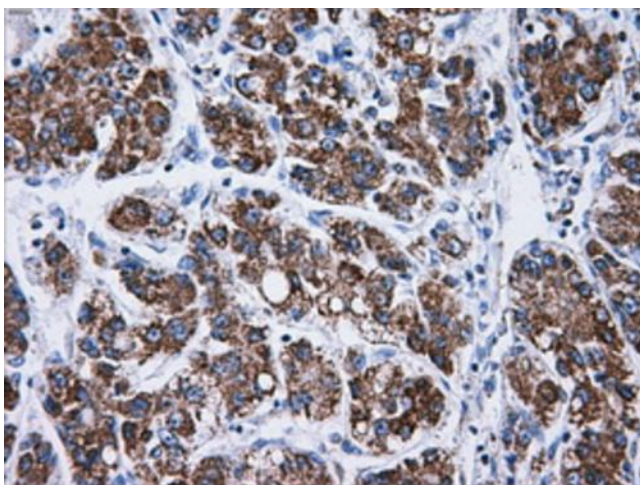
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ATP5B monoclonal antibody.



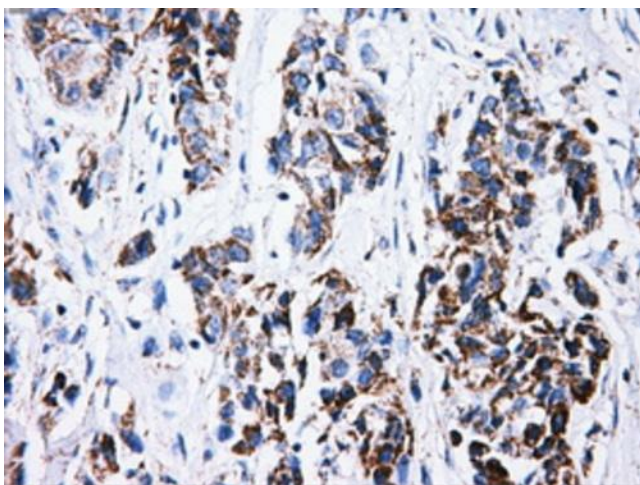
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ATP5B (RC201638), Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ATP5B. Positive lysates [LY400637] (100ug) and [LC400637] (20ug) can be purchased separately from OriGene.



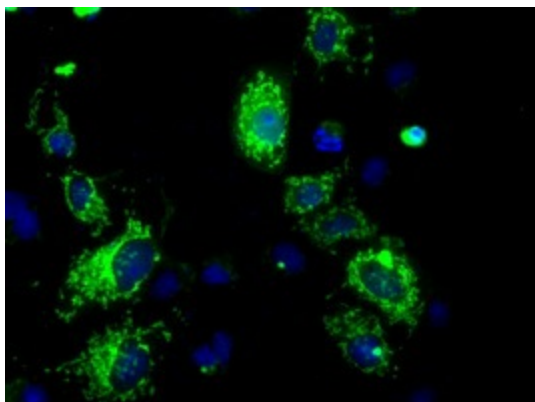
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of endometrium tissue using anti-ATP5B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500849], Dilution 1:50)



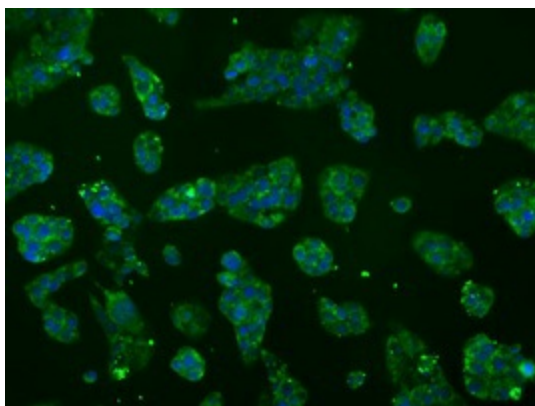
Immunohistochemical staining of paraffin-embedded Carcinoma of liver tissue using anti-ATP5B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500849], Dilution 1:50)



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of breast tissue using anti-ATP5B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500849], Dilution 1:50)



Anti-ATP5B mouse monoclonal antibody ([TA500849]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ATP5B ([RC201638]).



Immunofluorescent staining of HepG2 cells using anti-ATP5B mouse monoclonal antibody ([TA500849]).