

ATPIF1
Purified Mouse Monoclonal Antibody
Catalog # AO2601a**Specification**

ATPIF1 - Product Information

Application	E, WB, ICC, IHC
Primary Accession	Q9UII2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Calculated MW	12.3kDa KDa

Immunogen

Purified recombinant fragment of human ATPIF1 (AA: 1-106) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

ATPIF1 - Additional Information

Gene ID 93974

Other Names

IP; ATPi; ATPIP

Dilution

E~~ 1/10000
WB~~ 1/500 - 1/2000
ICC~~ 1/100 - 1/500
IHC~~ 1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ATPIF1 is for research use only and not for use in diagnostic or therapeutic procedures.

ATPIF1 - Protein Information

Name ATP5IF1 ([HGNC:871](#))

Synonyms ATPi, ATPIF1

Function

Endogenous F(1)F(o)-ATPase inhibitor limiting ATP depletion when the mitochondrial membrane

potential falls below a threshold and the F(1)F(o)-ATP synthase starts hydrolyzing ATP to pump protons out of the mitochondrial matrix. Required to avoid the consumption of cellular ATP when the F(1)F(o)-ATP synthase enzyme acts as an ATP hydrolase. Indirectly acts as a regulator of heme synthesis in erythroid tissues: regulates heme synthesis by modulating the mitochondrial pH and redox potential, allowing FECH to efficiently catalyze the incorporation of iron into protoporphyrin IX to produce heme.

Cellular Location

Mitochondrion.

ATPIF1 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATPIF1 - Images

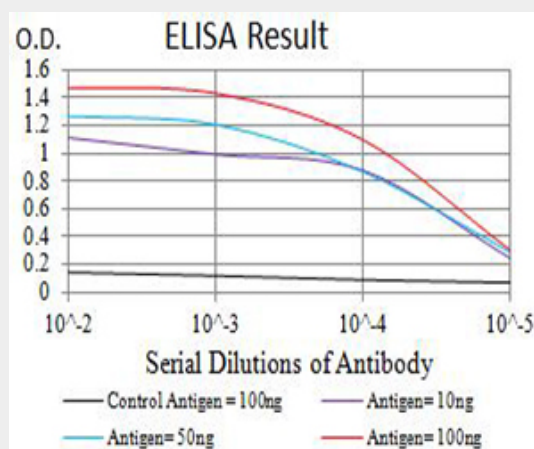


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10 ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

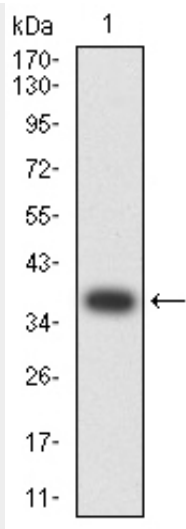


Figure 2: Western blot analysis using ATPIF1 mAb against human ATPIF1 (AA: 1-106) recombinant protein. (Expected MW is 38.2 kDa)

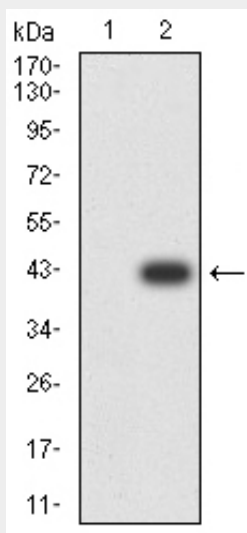


Figure 3: Western blot analysis using ATPIF1 mAb against HEK293 (1) and ATPIF1 (AA: 1-106)-hlgGfC transfected HEK293 (2) cell lysate.

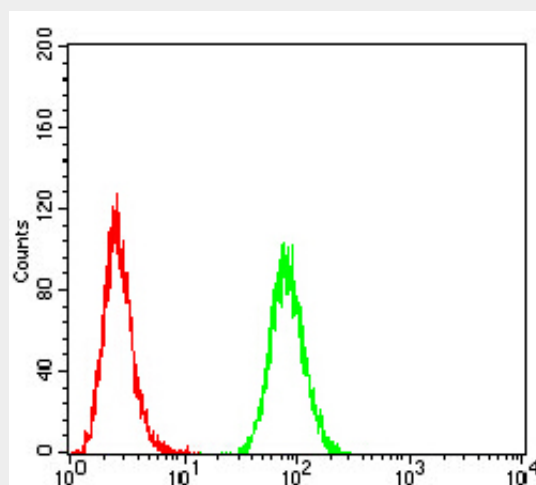


Figure 5: Flow cytometric analysis of HeLa cells using ATPIF1 mouse mAb (green) and negative

control (red).

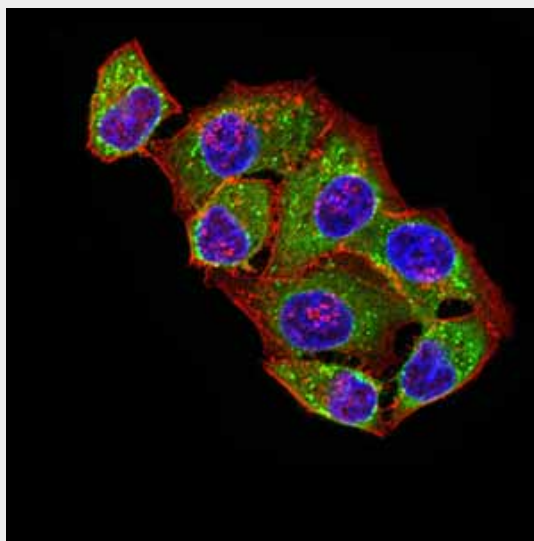


Figure 4: Immunofluorescence analysis of HeLa cells using ATPIF1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

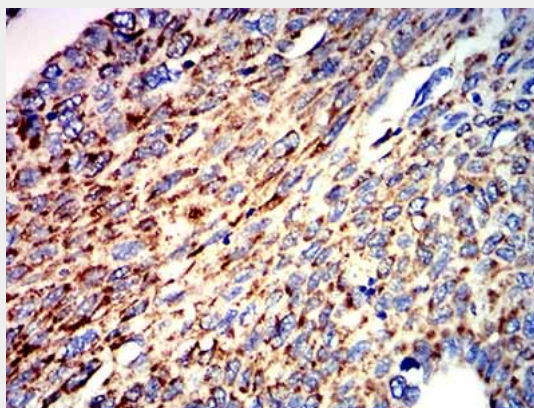


Figure 6: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using ATPIF1 mouse mAb with DAB staining.

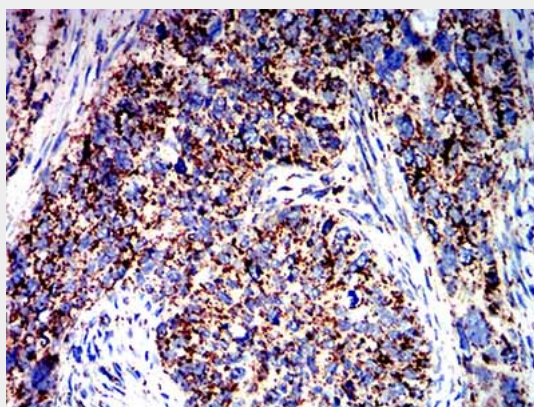


Figure 7: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ATPIF1 mouse mAb with DAB staining.

ATPIF1 - References

1.Pathobiology. 2015;82(5):224-32.2.Cell Rep. 2014 Apr 10;7(1):27-34.