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ATPIF1

Purified Mouse Monoclonal Antibody
Catalog # AO2601a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q9UII2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1F3B8
Isotype	Mouse IgG2b
Calculated MW	12249
Immunogen	Purified recombinant fragment of human ATPIF1 (AA: 1-106) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	93974
Other Names	IP; ATPI; ATPIP
Dilution	WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~ 1/100 - 1/500 E~~ 1/10000
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.

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 (PubMed:35926043). 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.

References

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

Images

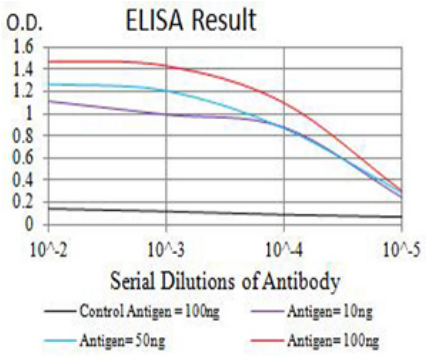


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

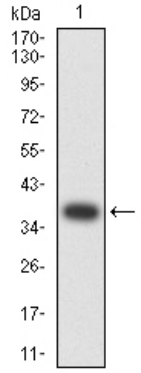


Figure 2:Western blot analysis using ATPIF1 mAb against human ATPIF1 (AA: 1-106) recombinant protein. (Expected MW is 38.2 kDa)

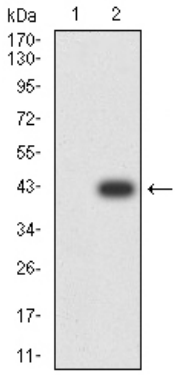
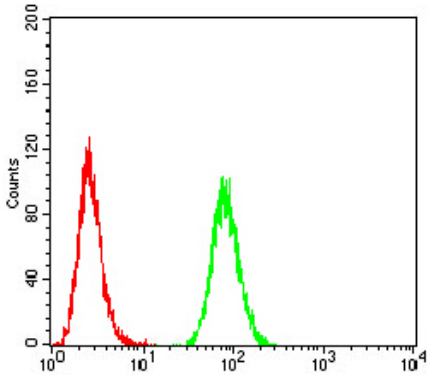


Figure 3:Western blot analysis using ATPIF1 mAb against HEK293 (1) and ATPIF1 (AA: 1-106)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 5:Flow cytometric analysis of Hela cells using ATPIF1 mouse mAb (green) and negative control (red).



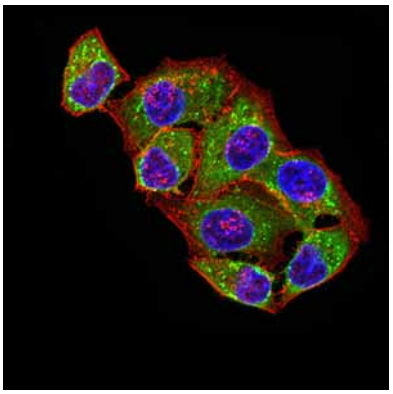


Figure 4:Immunofluorescence analysis of Hela cells using ATPIF1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

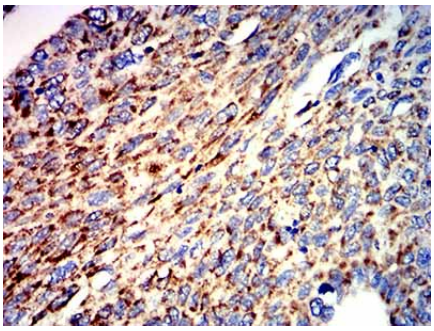


Figure 6:Immunohistochemical analysis of paraffin-embedded lung cancer tissues using ATPIF1 mouse mAb with DAB staining.

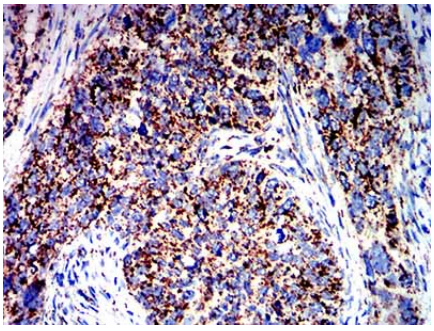


Figure 7:Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ATPIF1 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.