

## ATPIF1 Polyclonal Antibody

Catalog number: 12067-1-AP

Size: 47 µg/150 µl

Source: Rabbit

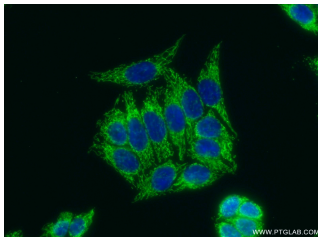
Isotype: IgG

Synonyms:

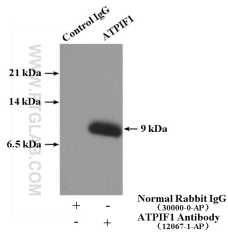
ATPIF1; ATPase inhibitory factor 1, ATP1, ATPIF1, ATPIP, IF(1), IF1, Inhibitor of F(1)F(o) ATPase, IP



HeLa cells were subjected to SDS PAGE followed by western blot with 12067-1-AP(ATPIF1 antibody) at dilution of 1:500



Immunofluorescent analysis of ( 10% Formaldehyde ) fixed HeLa cells using 12067-1-AP( ATPIF1 Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



IP Result of anti-ATPIF1 (IP:12067-1-AP, 4µg; Detection:12067-1-AP 1:500) with HeLa cells lysate 3440µg.

### Background

The H(+)-ATP synthase is a reversible engine of mitochondria that synthesizes or hydrolyzes ATP upon changes in cell physiology. ATP synthase dysfunction is involved in the onset and progression of diverse human pathologies. ATPIF1 gene encodes mitochondrial ATPase Inhibitory Factor 1 (IF1), also named ATP1, ATPIP or IP. Endogenous IF1 limits ATP depletion when the mitochondrial membrane potential falls below a threshold and the ATP synthase starts hydrolyzing ATP to pump protons out of the mitochondrial matrix. Mitochondrial content of IF1 controls the activity of oxidative phosphorylation mediating the shift of cancer cells to an enhanced aerobic glycolysis, thus supporting an oncogenic role of IF1 in cancer.

### Applications

|                         |  |
|-------------------------|--|
| Tested applications:    | ELISA, WB, IP, IF                                      |
| Cited applications:     | IF   |
| Species specificity:    | Human, Mouse; other species not tested.                |
| Cited species:          | Mouse  |
| Calculated ATPIF1 MW:   | 106aa,12 kDa   |
| Observed ATPIF1 MW:     | 12 kDa   |
| Positive WB detected in | HeLa cells   |
| Positive IP detected in | HeLa cells   |
| Positive IF detected in | HeLa cells   |
| Recommended dilution:   | WB: 1:500-1:5000<br>IP: 1:200-1:2000<br>IF: 1:50-1:500 |

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

|                           |                            |
|---------------------------|----------------------------|
| Immunogen:                | Ag2704                     |
| GenBank accession number: | BC009677                   |
| Gene ID (NCBI):           | 93974                      |
| Full name:                | ATPase inhibitory factor 1 |

### Product information

|                      |   |
|----------------------|---|
| Purification method: | Antigen affinity purification                                       |
| Storage:             | PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C. |