# ATPAF1 (h3): 293T Lysate: sc-176891



The Power to Question

#### **BACKGROUND**

The mitochondrial ATP synthases transduce the energy contained in the membrane's electrochemical proton gradients into the energy required for synthesis of high-energy phosphate bonds. F1 is the hydrophilic domain of ATPase that has three identical  $\alpha$  subunits, three identical  $\beta$  subunits and three additional subunits. Each ATPase contains three catalytic sites for synthesis, with one site located in each of the three  $\beta$  subunits. ATPAF1 (ATP synthase mitochondrial F1 complex assembly factor 1), also known as its yeast homolog Atp11p, is a 328 amino acid mitochondrial protein that is required for the assembly of F1- $\beta$  and F1- $\alpha$  subunits into the mitochondrial ATPase. Both ATPAF1 and ATPAF2 are broadly conserved in eukaryotes and are widely expressed, suggesting that they are essential housekeeping proteins. Due to their influence on enzyme assembly, it has been suggested that evaluation of ATPAF1 and ATPAF2 may be of interest in patients with ATP synthase deficiencies in which the underlying biochemical defect is unknown.

#### **REFERENCES**

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#### **CHROMOSOMAL LOCATION**

Genetic locus: ATPAF1 (human) mapping to 1p33.

#### **PRODUCT**

ATPAF1 (h3): 293T Lysate represents a lysate of human ATPAF1 transfected 293T cells and is provided as 100  $\mu g$  protein in 200  $\mu l$  SDS-PAGE buffer.

#### **APPLICATIONS**

ATPAF1 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive ATPAF1 antibodies. Recommended use: 10-20  $\mu$ l per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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