

# **Product datasheet for AM06656SU-N**

### OriGene Technologies, Inc.

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## AIF (AIFM1) Mouse Monoclonal Antibody [Clone ID: 4E7]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 4E7

**Applications:** ELISA, FC, IF, IHC, WB

Recommended Dilution: Western Blot: 1/500 - 1/2000.

Immunohistochemistry on paraffin sections: 1/200 - 1/1000.

Immunofluorescence: 1/200 - 1/1000.

Flow cytometry: 1/200 - 1/400.

**ELISA**: 1/10000.

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

**Immunogen:** Purified recombinant fragment of human AIF expressed in E. Coli.

**Specificity:** This antibody reacts to AIF.

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% sodium azide.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 67 kDa

**Gene Name:** apoptosis inducing factor, mitochondria associated 1

**Database Link:** Entrez Gene 9131 Human

<u>095831</u>



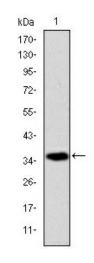


#### Background:

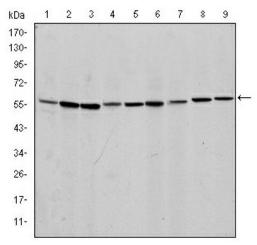
This gene encodes a flavoprotein essential for nuclear disassembly in apoptotic cells, and it is found in the mitochondrial intermembrane space in healthy cells. Induction of apoptosis results in the translocation of this protein to the nucleus where it affects chromosome condensation and fragmentation. In addition, this gene product induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. Mutations in this gene cause combined oxidative phosphorylation deficiency 6, which results in a severe mitochondrial encephalomyopathy. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 10

Synonyms: PDCD8

# **Product images:**

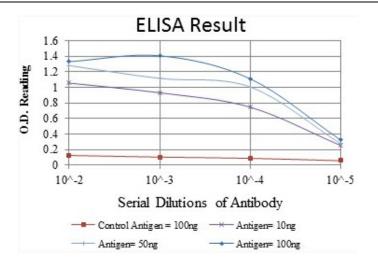


Western blot analysis using AIF mAb against human AIF (AA: 1-261) recombinant protein. (Expected MW is 35.6 kDa)

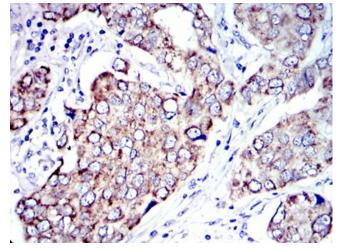


Western blot analysis using AIF mouse mAb against NIH/3T3 (1), Jurkat (2), Hela (3), HepG2 (4), MOLT4 (5), C6 (6), RAJI (7), Cos7 (8) and PC-12 (9) cell lysate.

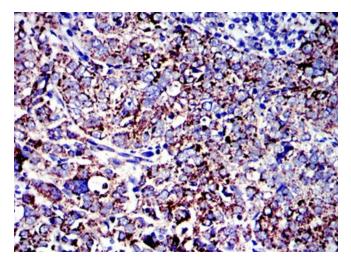




Red: Control Antigen (100ng) Purple: Antigen (10ng) Green: Antigen (50ng) Blue: Antigen (100ng)

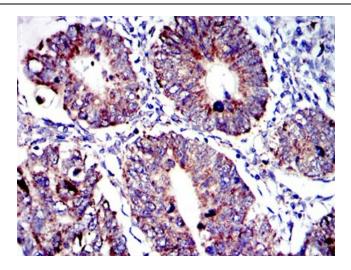


Immunohistochemical analysis of paraffinembedded human breast cancer tissues using AIF mouse mAb with DAB staining.

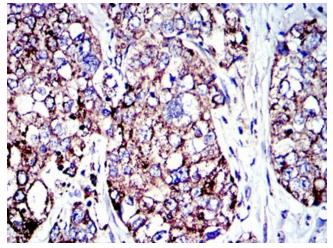


Immunohistochemical analysis of paraffinembedded human cervical cancer tissues using AIF mouse mAb with DAB staining.

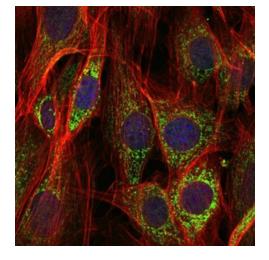




Immunohistochemical analysis of paraffinembedded human rectum cancer tissues using AIF mouse mAb with DAB staining.

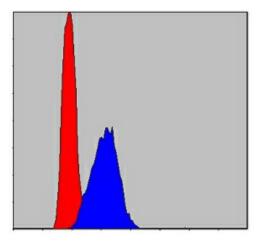


Immunohistochemical analysis of paraffinembedded human lung cancer tissues using AIF mouse mAb with DAB staining.



Immunofluorescence analysis of NIH/3T3 cells using AIF mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.





Flow cytometric analysis of HepG2 cells using AIF mouse mAb (blue) and negative control (red).