

# **Product datasheet for TA392629M**

## **AIF (AIFM1) Rabbit Polyclonal Antibody**

### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

Recommended Dilution: WB: 1:2000~1:5000 IP:1:2000~1:5000

Reactivity: Human, Rat, Mouse

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Recombinant protein of human AIF.

**Specificity:** AIF polyclonal antibody detects endogenous levels of AIF protein.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.4.

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

Predicted Protein Size: ~ 72 kDa

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

**Database Link:** Entrez Gene 9131 Human

O95831



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#### Background:

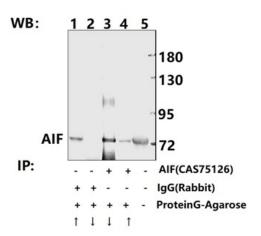
Apoptosis-inducing factor (AIF, PDCD8) is a ubiquitously expressed flavoprotein that plays a critical role in caspase-independent apoptosis. AIF is normally localized to the mitochondrial intermembrane space and released in response to apoptotic stimuli. Treatment of isolated nuclei with recombinant AIF leads to early apoptotic events, such as chromatin condensation and large-scale DNA fragmentation. Studies of AIF knockout mice have shown that the apoptotic activity of AIF is cell type and stimuli-dependent. Also noted was that AIF was required for embryoid body cavitation, representing the first wave of programmed cell death during embryonic morphogenesis. Structural analysis of AIF revealed two important regions, the first having oxidoreductase activity and the second being a potential DNA binding domain. While AIF is redox-active and can behave as an NADH oxidase, this activity is not required for inducing apoptosis. Instead, recent studies suggest that AIF has dual functions, a pro-apoptotic activity in the nucleus via its DNA binding and an anti-apoptotic activity via the scavenging of free radicals through its oxidoreductase activity.

Synonyms:

AIFM1; Apoptosis-inducing factor 1, mitochondrial; Programmed cell death protein 8

**Note:** For research use only, not for use in diagnostic procedure.

### **Product images:**



Immunoprecipitation - AIF Polyclonal Antibody