

AIFM1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50967-100 □

Specification

AIFM1 Antibody - Product info

Application	WB
Primary Accession	Q95831
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67 KDa

AIFM1 Antibody - Additional info

Gene ID 9131

Other Names

Apoptosis-inducing factor 1, mitochondrial, 111-, Programmed cell death protein 8, AIFM1, AIF, PDCD8

Target/Specificity

KLH conjugated synthetic peptide derived from human AIFM1

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.1% Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

AIFM1 Antibody - Protein Information

Name AIFM1

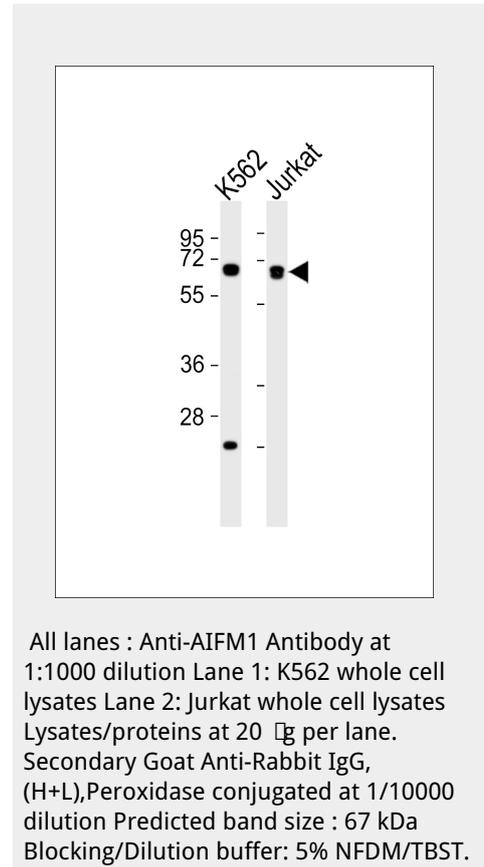
Synonyms AIF, PDCD8

Function

Functions both as NADH oxidoreductase and as regulator of apoptosis. In response to apoptotic stimuli, it is released from the mitochondrion intermembrane space into the cytosol and to the nucleus, where it functions as a proapoptotic factor in a caspase-independent pathway. In contrast, functions as an antiapoptotic factor in normal mitochondria via its NADH oxidoreductase activity. The soluble form (AIFsol) found in the nucleus induces 'parthanatos' i.e. caspase-independent fragmentation of chromosomal DNA. Interacts with EIF3G, and thereby inhibits the EIF3 machinery and protein synthesis, and activates caspase-7 to amplify apoptosis. Plays a critical role in caspase-independent, pyknotic cell death in hydrogen peroxide-exposed cells. Binds to DNA in a sequence-independent manner.

Cellular Location

Mitochondrion intermembrane space. Mitochondrion inner



membrane. Cytoplasm. Nucleus. Cytoplasm, perinuclear region. Note=Proteolytic cleavage during or just after translocation into the mitochondrial intermembrane space (IMS) results in the formation of an inner-membrane-anchored mature form (AIFmit). During apoptosis, further proteolytic processing leads to a mature form, which is confined to the mitochondrial IMS in a soluble form (AIFsol). AIFsol is released to the cytoplasm in response to specific death signals, and translocated to the nucleus, where it induces nuclear apoptosis. Colocalizes with EIF3G in the nucleus and perinuclear region Isoform 5: Cytoplasm

Tissue Location

Detected in muscle and skin fibroblasts (at protein level). Isoform 5 is frequently down-regulated in human cancers.

AIFM1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [□Western Blot](#)
- [□Blocking Peptides](#)
- [□Dot Blot](#)
- [□Immunohistochemistry](#)
- [□Immunofluorescence](#)
- [□Immunoprecipitation](#)
- [□Flow Cytometry](#)
- [□Cell Culture](#)

AIFM1 Antibody - Background

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AIFM1 Antibody - References

Susin S.A., et al. *Nature* 397:441-446(1999). Delettre C., et al. *J. Biol. Chem.* 281:6413-6427(2006). Delettre C., et al. *J. Biol. Chem.* 281:18507-18518(2006). Rhodes S., et al. Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases. Ota T., et al. *Nat. Genet.* 36:40-45(2004).