Product Name: AIF-M1 Rabbit Polyclonal Antibody
Catalog #: APRab06701
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Molecular Weight	67kDa

Antigen Information

Gene Name	AIFM1
Alternative Names	AIFM1; AIF; PDCD8; Apoptosis-inducing factor 1; mitochondrial; Programmed cell death protein 8
Gene ID	9131.0
SwissProt ID	O95831
Immunogen	The antiserum was produced against synthesized peptide derived from human AIFM1. AA range:51-100

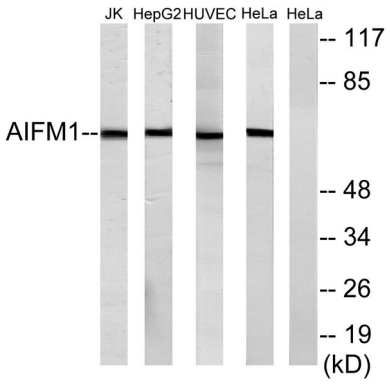
Background

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 (COXPD6), a severe mitochondrial encephalomyopathy, as well as Cowchock syndrome, also known as X-linked recessive Charcot-Marie-Tooth disease-4 (CMTX-4), a disorder resulting in neuropathy, and axonal and motor-sensory defects with deafness and mental retardation. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosomecatalytic activity:2 glutathione + protein-disulfide = glutathione disulfide + protein-dithiol.,cofactor:FAD.,function:Possesses significant protein thiol-disulfide oxidase activity.,function:Probable oxidoreductase that acts as a caspase-independent mitochondrial effector of apoptotic cell death. Extramitochondrial AIF induces nuclear chromatin condensation and large scale DNA fragmentation (in vitro). Binds to DNA in a sequence-independent manner.,similarity:Belongs to the FAD-dependent oxidoreductase family.,similarity:Contains 1 thioredoxin domain.,subcellular location:Translocated to the nucleus upon induction of apoptosis.,subunit:Interacts with XIAP.,tissue specificity:Widely expressed.,

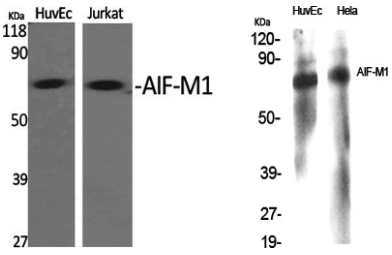
Research Area

Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;

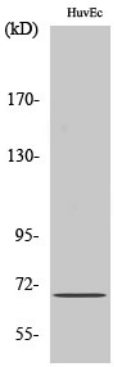
Image Data



Western blot analysis of lysates from HUVEC cells, HepG2 cells, HeLa cells, and Jurkat cells, using AIFM1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using AIF-M1 Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of Jurkat cells using AIF-M1 Polyclonal Antibody diluted at 1: 1000