

PRODUCT DATA SHEET

AIF: mouse mAb

Catalog No.	IMB0203
Reactivity	Human
Applications	WB; IF/ICC
Gene Name	aIF:m1
Protein Name	-
Human Gene Id	9131
Swiss-Prot	O95831
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Dilution	WB: 1:1000 ICC: 1:200
PurIF:ication	The antibody was affinity-purIF:ied from mouse ascites by affinity-
	chromatography using epitope-specIF:ic immunogen.
Concentration	1 mg/ml
Storage&Stability	-20°C/1 year

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 identIF:ied on chromosome

Subcellular Location.

Background

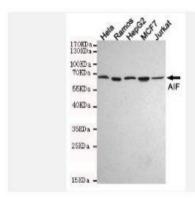
Mitochondrion intermembrane space. Mitochondrion inner membrane. Cytoplasm. Nucleus. Cytoplasm, perinuclear region. Proteolytic cleavage during or just after translocation into the mitochondrial intermembrane space (IMS) results in the formation of an inner-membrane-anchored mature form (AIF:mit). During apoptosis, further proteolytic processing leads to a mature form, which is confined to the mitochondrial IMS in a soluble form (AIF:sol). AIF:sol is released to the cytoplasm in response to specIF:ic death signals, and translocated to the nucleus, where it induces nuclear apoptosis (PubMed:15775970). Colocalizes with EIF:3G in the nucleus and perinuclear region (PubMed:17094969). [Isoform 3]: Mitochondrion intermembrane space. Mitochondrion inner membrane. Has a stronger membrane anchorage than isoform 1. [Isoform 4]: Mitochondrion. Cytoplasm, cytosol. In proapoptotic conditions, is released from mitochondria to cytosol in a calpain/cathepsin-dependent manner. [Isoform 5]: Cytoplasm.



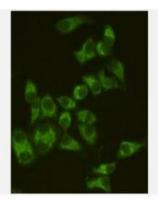
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BiowMW

Products Images:



Western blot analysis of extracts from Hela,Ramos,HepG2,MCF7 and Jurkat cell lysates using AIF mouse mAb (1:1000 diluted).Predicted band size:67KDa.Observed band size:67KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-AIF mouse mAb (dilution 1:200).