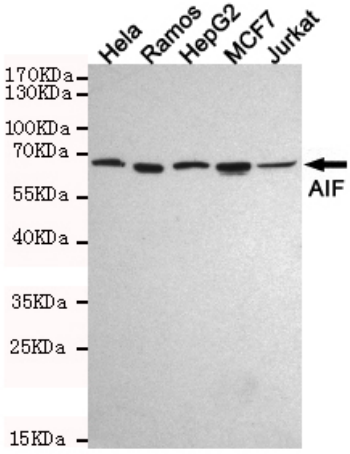
AIF mouse mAb

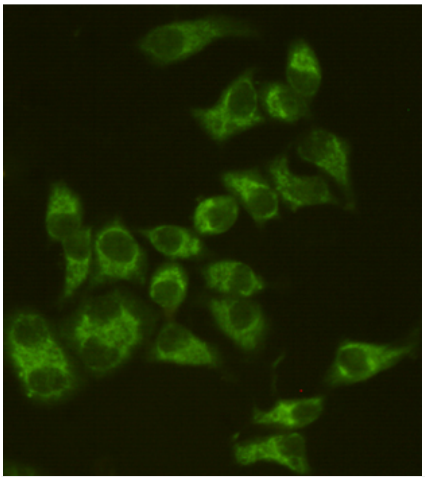
Catalog No	YP-Ab-00108
Isotype	IgG
Reactivity	Human
Applications	WB;IF
Gene Name	aifm1
Protein Name	
Immunogen	Purified recombinant human AIF protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of AIF and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb dilution 1:1000 icc dilution 1:200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AIFM1; AIFM1_HUMAN; Apoptosis inducing factor 1, mitochondrial; Apoptosis inducing factor; Apoptosis inducing factor, mitochondrion associated, 1; Apoptosis-inducing factor 1; CMTX4; COWCK; COXPD6; Harlequin; Hq; mAIF; MGC111425; MGC5706; mitochondrial; Neuropathy, axonal motor-sensory, with deafness and mental retardation; neuropathy, axonal, motor-sensory with deafness and mental retardation (Cowchock syndrome); PDCD 8; PDCD8; Programmed cell death 8 (apoptosis inducing factor); Programmed cell death 8; Programmed cell death 8 isoform 1; Programmed cell death 8 isoform 2; Programmed cell death 8 isoform 3; Programmed cell death protein 8; Programmed cell death protein 8 mitochondrial; Programmed cell death protein 8 mitochondrial precursor; Striatal apoptosis inducing factor.
Observed Band	67kD
Cell Pathway	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 (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 (PubMed:15775970). Colocalizes with EIF3G in the nucleus and perinuclear region (PubMed:17094969). .; [Isoform 3]: Mitochondrion intermembrane space . Mitochondrion inner membrane . Has a stronger membrane ancho
Tissue Specificity	Expressed in all tested tissues (PubMed:16644725). Detected in muscle and skin fibroblasts (at protein level) (PubMed:23217327). Expressed in osteoblasts (at protein level) (PubMed:28842795). ; [Isoform 3]: Brain specific. ; [Isoform 4]: Expressed in all tested tissues except brain. ; [Isoform 5]: Isoform 5 is frequently down-regulated in human cancers.
Function	catalytic 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.,
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 chromosome
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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).