AIFM1 Mouse mAb

CatalogNo: YM1505

Key Features

Host Species
- Mouse

Reactivity
- Human

Applications
- WB,IF

MW
- 67kD (Observed)

Recommended Dilution Ratios

WB 1:1000
ICC 1:200
IF 1:50-200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Monoclonal

Immunogen Information

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.

Target Information

Gene name AIFM1 ALF PDCD8

Protein Name Apoptosis-inducing factor 1 mitochondrial

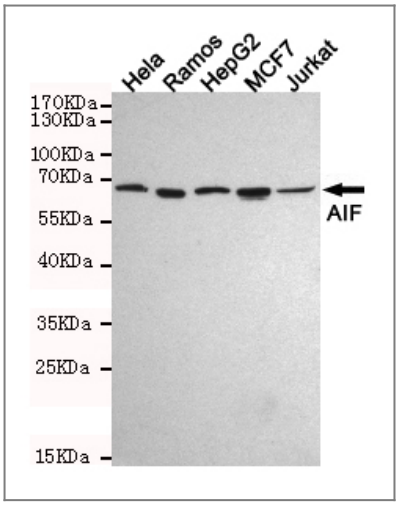
Organism	Gene ID	UniProt ID
Human	9131;	O95831;
Mouse	26926;	Q9Z0X1;
Rat	83533;	Q9JM53;

Cellular Localization 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 anchorage than isoform 1. .; [Isoform 4]: Mitochondrion . Cytoplasm, cytosol . In pro-apoptotic conditions, is released from mitochondria to cytosol in a calpain/cathepsin-dependent manner. .; [Isoform 5]: Cytoplasm .

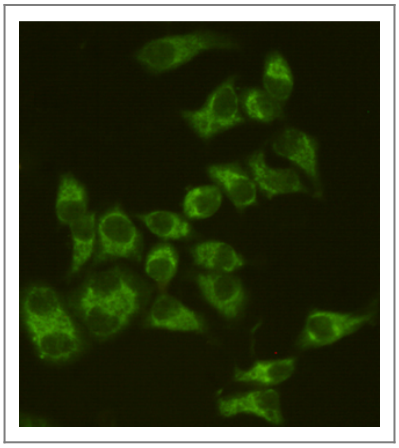
Tissue specificity Expressed in all tested tissues (PubMed:16644725). Detected in muscle and skin fibroblasts (at protein level) (PubMed:23217327). Expressed in osteoblasts (at protein level) (PubMed:28842795). ; [Isoform 3]: Brain specific. ; [Isoform 4]: Expressed in all tested tissues except brain. ; [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.,

Validation Data



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).

Contact information

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Please scan the QR code to access additional product information:
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