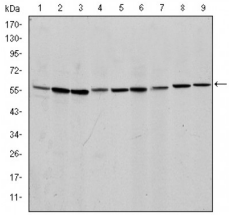
AIF Ab

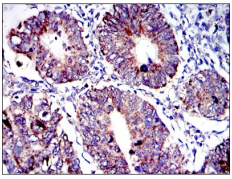
Cat.#: BF0591	Concn.: 1mg/ml	Mol.Wt.: 67kDa
Size: 50ul,100ul,200ul	Source: Mouse	Clonality: Monoclonal

Application:	ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000, ICC 1/200 - 1/1000, FCM 1/200 - 1/400
Reactivity:	Human,Mouse,Rat,Monkey
Purification:	Affinity-chromatography.
Specificity:	AIF Ab detects endogenous levels of total AIF.
Immunogen:	Purified recombinant fragment of human AIF expressed in E. Coli.
Uniprot:	O95831
Description:	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, which results in a severe mitochondrial encephalomyopathy. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 10
Subcellular Location:	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. Colocalizes with EIF3G in the nucleus and perinuclear region.
Tissue Specificity:	Detected in muscle and skin fibroblasts (at protein level). Isoform 5 is frequently down-regulated in human cancers.
Similarity:	Belongs to the FAD-dependent oxidoreductase family.
Storage Condition and	Mouse IgG1 in phosphate buffered saline (without Mg2+ and

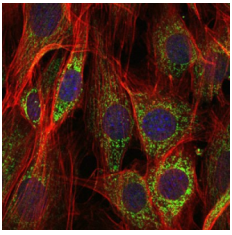
Buffer: Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



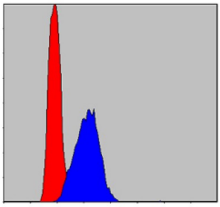
Western blot analysis using AIF mAb against human AIF (AA: 1-261) recombinant protein. (Expected MW is 35.6 kDa)



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using AIF mouse mAb with DAB staining.



Immunofluorescence analysis of NIH/3T3 cells using AIF mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HepG2 cells using AIF mouse mAb (blue) and negative control (red).

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.