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AIFM1 Recombinant Monoclonal Antibody

Product Code	CSB-RA296617A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O95831
Immunogen	A synthesized peptide derived from human AIF
Species Reactivity	Human, Rat
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Functions both as NADH oxidoreductase and as regulator of apoptosis. In response to apoptotic stimuli, it is released from the mitochondrion intermembrane space into the cytosol and to the nucleus, where it functions as a proapoptotic factor in a caspase-independent pathway. In contrast, functions as an antiapoptotic factor in normal mitochondria via its NADH oxidoreductase activity. The soluble form (AIFsol) found in the nucleus induces 'parthanatos' i.e. caspase-independent fragmentation of chromosomal DNA. Interacts with EIF3G,and thereby inhibits the EIF3 machinery and protein synthesis, and activates casapse-7 to amplify apoptosis. Plays a critical role in caspase-independent, pyknotic cell death in hydrogen peroxide-exposed cells. Binds to DNA in a sequence-independent manner.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Cell biology; Metabolism
Gene Names	AIFM1
Clone No.	
Cione No.	4B2

Image

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Western Blot

Positive WB detected in: Hela whole cell lysate, Jurkat whole cell lysate, A549 whole cell lysate, HepG2 whole cell lysate, MCF-7 whole cell lysate, Rat liver tissue, Rat kidney tissue All lanes: AIFM1 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 67, 36, 29, 27 kDa Observed band size: 67 kDa



IHC image of CSB-RA296617A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA296617A0HU diluted at 1:100 and staining in paraffin-embedded human liver tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

AIFM1 antibody CSB-RA296617A0HU is a recombinant monoclonal antibody produced from the expression of the plasmids that were constructed by the AIFM1 monoclonal antibody (generated from animals with the human AIFM1 synthesized peptide immunization) DNA sequence in cell lines. This AIFM1 recombinant antibody is a rabbit IgG antibody. It was purified using the affinitychromatography method. It can recognize and detect the AIFM1 protein from human and rat samples. And it is suitable for ELISA, IHC, and WB analyses.

The target protein AIFM1 is released from the mitochondrial intermembrane space (IMS) during apoptosis and can induce chromatin condensation and DNA fragmentation in a caspase-independent manner. It also functions as a mitochondrial flavin adenine dinucleotide (FAD)-dependent nicotinamide adenine dinucleotide (NADH) oxidoreductase that regulates respiratory complex assembly and function, produces reactive oxygen species (ROS), and coordinates parthanatos.