

Datasheet for ABIN7318175

AIF Protein (His tag)



Overview

Quantity:	50 µg
Target:	AIF (AIFM1)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AIF protein is labelled with His tag.
Product Details	
Purpose:	Recombinant Human AIFM1 Protein (His Tag)
Sequence:	Glu121-Asp613
Characteristics:	Recombinant Human Apoptosis-Inducing Factor 1, Mitochondrial is produced by our E.coli expression system and the target gene encoding Glu121-Asp613 is expressed with a 6His tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Target Details	
Target:	AIF (AIFM1)
Alternative Name:	AIFM1 (AIFM1 Products)
Background:	Background: Apoptosis-Inducing Factor 1, Mitochondrial (AIFM1) is a flavoprotein essential for

nuclear disassembly in apoptotic cells that is found in the mitochondrial intermembrane space

in healthy cells. During apoptosis, it is translocated from the mitochondria to the nucleus to function as a proapoptotic factor in a caspase-independent pathway, while in normal mitochondria, it functions as an antiapoptotic factor via its oxidoreductase activity. The soluble form (AIFsol) found in the nucleus induces parthanatos i.e., caspase-independent fragmentation of chromosomal DNA. AIFM1 interacts with EIF3G, and thereby inhibits the EIF3 machinery and protein synthesis, and activates casapse-7 to amplify apoptosis. It binds to DNA in a sequence-independent manner and plays a critical role in caspase-independent, pyknotic cell death in hydrogen peroxide-exposed cells.

Synonym: Apoptosis-Inducing Factor 1 Mitochondrial, Programmed Cell Death Protein 8, AIFM1, AIF, PDCD8

Molecular Weight: 56.2 kDa

Apoptosis, Positive Regulation of Endopeptidase Activity, Cell RedoxHomeostasis, Smooth Muscle Cell Migration, Warburg Effect

Application Details

Restrictions: For Research Use only

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Handling

UniProt:

Pathways:

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.2.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.
	Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.