

Recombinant Human Apoptosis-Inducing Factor 1 Mitochondrial/AIFM1 Protein(N-6His)

Cat.NO.: TP05991

3th Edition

Synonyms:Apoptosis-Inducing Factor 1 Mitochondrial; Programmed Cell Death Protein 8; AIFM1; AIF; PDCD8

Description: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 caspase-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.

Form:PBS

Molecular Weight:56.2 kDa

Sequences:Glu121-Asp613

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.