

Recombinant Human AIF protein ab177656

1 图像

描述	
产品名称	重组人AIF蛋白
纯度	> 95 % SDS-PAGE. ab177656 was purified using conventional chromatography.
表达系统	Escherichia coli
Accession	<u>O95831-3</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
序列	MGSSHHHHHH SSGLVPRGSH MGSEFLGLTP EQKQKKAALS ASEGEEVPQD KAPSHVPFLL IGGGTAFAAA ARSIRARDPG ARVLIVSEDP ELPYMRPPLS KELWFSDDPN VTKTLRFKQW NGKERSIYFQ PPSFYVSAQD LPHIENGVA VLTGKKVVQL DVRDNMVKLN DGSQITYEKC LIATGGTPRS LSAIDRAGAE VKSRTTLFRK IGDFRSLEKI SREVKSITII GGGFLGSELA CALGRKARAL GTEVIQLFPE KGNMGKILPE YLSNWTMEKV RREGVKVMPN AIVQSVGVSS GKLLIKLKDG RKVETDHIVA AVGLEPNVEL AKTGGLEIDS DFGGFRVNAE LQARSNIWVA GDAACFYDIK LGRRRVEHHD HAVVSGRLAG ENMTGAAKPY WHQSMFWSDL GPDVGYEAIG LVDSSLPTVG VFAKATAQDN PKSATEQSGT GIRSESETES EASEITIPPS TPAVPQAPVQ GEDYGKGVIF YLRDKVVVGI VLWNIFNRMP IARKIIKDGE QHEDLNEVAK LFNIHED
预测分子量	59 kDa including tags
氨基酸	98 to 609
标签	His tag N-Terminus
额外的序列信息	NP_665811

Our **Abpromise guarantee** covers the use of **ab177656** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.32% Tris HCl, 0.58% Sodium chloride, 10% Glycerol (glycerin, glycerine)

常规信息

功能 Probable oxidoreductase that has a dual role in controlling cellular life and death; 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. Interacts with EIF3G, and thereby inhibits the EIF3 machinery and protein synthesis, and activates caspase-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.

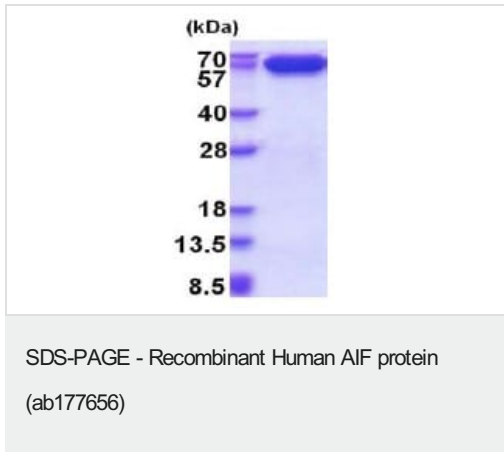
疾病相关 Defects in AIFM1 are the cause of combined oxidative phosphorylation deficiency type 6 (COXPD6) [MIM:300816]. It is a mitochondrial disease resulting in a neurodegenerative disorder characterized by psychomotor delay, hypotonia, areflexia, muscle weakness and wasting.

序列相似性 Belongs to the FAD-dependent oxidoreductase family.

翻译后修饰 Under normal conditions, a 54-residue N-terminal segment is first proteolytically removed during or just after translocation into the mitochondrial intermembrane space (IMS) by the mitochondrial processing peptidase (MPP) to form the inner-membrane-anchored mature form (AIFmit). During apoptosis, it is further proteolytically processed at amino-acid position 101 leading to the generation of the 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 in a caspase-independent manner.

细胞定位 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.

图片



15% SDS-PAGE analysis of ab177656 (3 µg).

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