# abcam

# Product datasheet

# Anti-AIF antibody ab137725

## 4 图像

#### 概述

免疫原

产品名称 Anti-AIF抗体

描述 兔多克隆抗体to AIF

**宿主** Rabbit

经测试应用 适用于: WB, IHC-P, ICC/IF

种属反应性 与反应: Mouse, Human

预测可用于: Rat, Cow 🕰

Recombinant fragment corresponding to Human AIF aa 50-350. Corresponding to a region within

amino acids 82-330 of Human AIF.

Database link: **095831-1** 

**阳性**对照 H1299, HepG2 and Mouse liver whole cell lysates; SW480 xenograft tissue; HeLa cells; 293T,

A431, Molt4 and Raji

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.00

Preservative: 0.01% Thimerosal (merthiolate)

Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)

纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** lgG

1

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab137725于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500 - 1/3000. Predicted molecular weight: 67 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol using 10mM Citrate buffer (pH6.0) or Tris-EDTA buffer (pH8.0).
ICC/IF		1/100 - 1/1000.

#### 靶标

#### 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 (AlFsol) found in the nucleus induces 'parthanatos' i.e., caspase-independent fragmentation of chromosomal DNA. Interacts with ElF3G,and thereby inhibits the ElF3 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.

#### 疾病相关

# (COXPD6) [MIM:300816]. It is a mitochondrial disease resulting in a neurodegenerative disorder characterized by psychomotor delay, hypotonia, areflexia, muscle weakness and wasting.

Defects in AIFM1 are the cause of combined oxidative phosphorylation deficiency type 6

## 序列相似性

#### Belongs to the FAD-dependent oxidoreductase family.

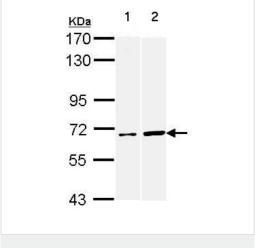
翻译后修饰

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 (AlFmit). 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 (AlFsol). AlFsol 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 (AlFmit). During apoptosis, further proteolytic processing leads to a mature form, which is confined to the mitochondrial IMS in a soluble form (AlFsol). AlFsol 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



All lanes: Anti-AIF antibody (ab137725) at 1/1000 dilution

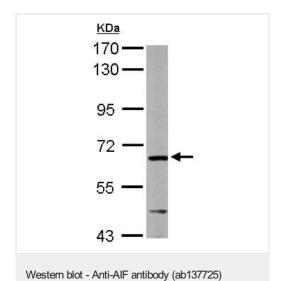
Lane 1 : H1299 whole cell lysate
Lane 2 : HepG2 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 67 kDa

Western blot - Anti-AIF antibody (ab137725)

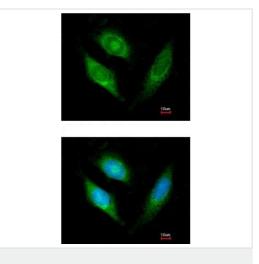
7.5% SDS PAGE



Anti-AlF antibody (ab137725) at 1/1000 dilution + Mouse liver whole cell lysate at 50  $\mu g$ 

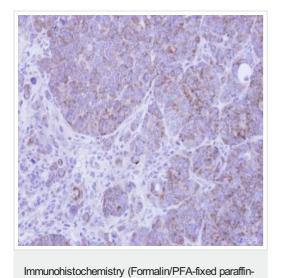
Predicted band size: 67 kDa

7.5% SDS PAGE



Immunofluorescenct analysis of methanol-fixed HeLa cells labelling AIF with ab137725 at 1/200 dilution. Lower panel shows costaining with Hoechst 33342.

Immunocytochemistry/ Immunofluorescence - Anti-AIF antibody (ab137725)



embedded sections) - Anti-AIF antibody (ab137725)

Immunohistochemical analysis of paraffin-embedded SW480 xenograft tissue labelling AIF with ab137725 at 1/100 dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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