

# Anti-AIF antibody ab99437

**1 References**   **3 图像**

### 概述

|       |   |
|-------|---|
| 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, IP, IHC-P  |
| 种属反应性 | 与反应: Human<br>预测可用于: Mouse, Rabbit, Horse, Chicken, Cow, Dog, Turkey, Pig, Zebrafish, Rhesus monkey, Gorilla, Orangutan, Medaka fish   |
| 免疫原   | Synthetic peptide corresponding to Human AIF aa 550-650. 563-613 of Human AIF (NP_004199.1)<br>Database link: <a href="#">O95831-1</a>  |
| 阳性对照  | HeLa and 293T cell lines.   |
| 常规说明  | <p>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.</p> <p>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&amp;As</p> |

### 性能

|      |   |
|------|---|
| 形式   | Liquid  |
| 存放说明 | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.       |
| 存储溶液 | pH: 6.8<br>Preservative: 0.09% Sodium azide<br>Constituents: 0.1% BSA, Tris buffered saline |
| 纯度   | Immunogen affinity purified   |
| 克隆   | 多克隆   |
| 同种型  | IgG   |

## 应用

**The Abpromise guarantee** Abpromise™ 承诺保证使用ab99437于以下的经测试应用

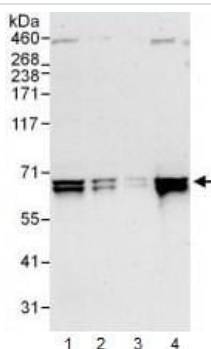
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用    | Ab评论 | 说明   |
|-------|------|--|
| WB    |      | 1/2000 - 1/10000. Predicted molecular weight: 67 kDa.  |
| IP    |      | Use at 2-5 µg/mg of lysate.  |
| IHC-P |      | 1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

## 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 (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



Western blot - Anti-AIF antibody (ab99437)

**All lanes** : Anti-AIF antibody (ab99437) at 0.04 µg/ml

**Lane 1** : HeLa whole cell lysate at 50 µg

**Lane 2** : HeLa whole cell lysate at 15 µg

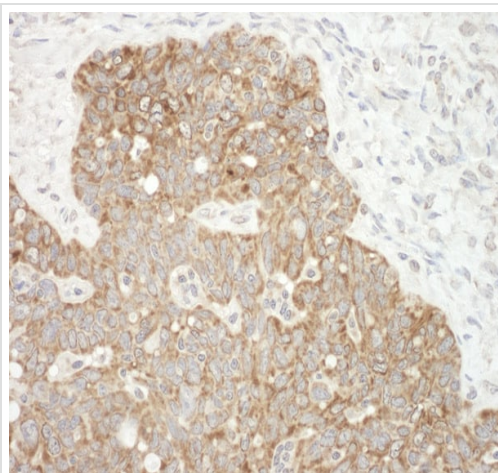
**Lane 3** : HeLa whole cell lysate at 5 µg

**Lane 4** : 293T whole cell lysate at 50 µg

Developed using the ECL technique.

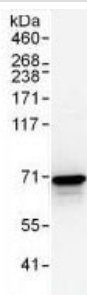
**Predicted band size:** 67 kDa

**Exposure time:** 30 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIF antibody (ab99437)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian carcinoma tissue labelling AIF with ab99437 at 1/1000 (1µg/mg). Detection: DAB.



Immunoprecipitation - Anti-AIF antibody (ab99437)

**Immunoprecipitation** : 1 mg of HeLa cell lysate

immunoprecipitated with ab99437 at 3 µg/mg lysate; 20% of immunoprecipitate loaded in lane

**Western Blot:** AIF antibody (ab99437) at 0.4 µg/ml

developed using the ECL technique

**Exposure time** : 10 seconds

**Predicted band size** : 67 kDa

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