

# Anti-Cyclophilin F antibody [E11AE12BD4] ab110324

敲除验证

★★★★☆ 4 Abreviews 96 References 7 图像

### 概述

产品名称	Anti-Cyclophilin F抗体[E11AE12BD4]
描述	小鼠单克隆抗体[E11AE12BD4] to Cyclophilin F
宿主	Mouse
经测试应用	适用于: WB, Flow Cyt, ICC/IF, IHC-P
种属反应性	与反应: Mouse, Rat, Cow, Human
免疫原	Recombinant full length protein corresponding to Rat Cyclophilin F aa 1-206. (also known as CypD)
阳性对照	Isolated mitochondria from Human heart, Bovine heart, Rat heart, Mouse heart, HEK293T, HepG2 cells; Cultured Human embryonic lung-derived fibroblasts (strain MRC5); Human cerebellum tissue; HL60 cells.
常规说明	<p>This monoclonal antibody to cyclophilin F has been knockout validated in Western blot. The expected band for cyclophilin F was observed in wild type cells and the band was not seen in knockout cells.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <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. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.4 Preservative: 0.02% Sodium azide

纯化说明	Constituent: HEPES buffered saline ab110324 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
克隆	单克隆
克隆编号	E11AE12BD4
同种型	IgG1
轻链类型	kappa

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab110324 于以下的经测试应用

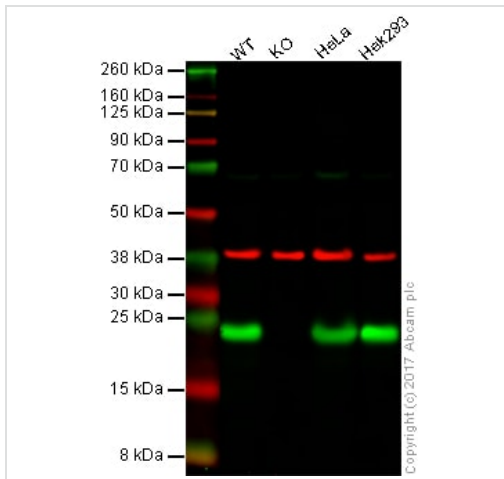
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Predicted molecular weight: 22 kDa.
Flow Cyt		Use a concentration of 1 µg/ml. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		1/100. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

## 靶标

功能	PPases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.
序列相似性	Belongs to the cyclophilin-type PPase family. Contains 1 PPase cyclophilin-type domain.
细胞定位	Mitochondrion matrix.
形式	This gene encodes a 178 aa mature protein that is found in the mitochondrion and may participate in the permeability transition pore. While technically this protein is Cyclophilin F, literature references commonly refer to this protein as 'cyclophilin D' or 'CypD'. A different cytoplasmic protein of 370 aa, represented by Entrez GeneID 5481, is identified as Cyclophilin D. This antibody does not react with this 370 aa cytoplasmic protein.

## 图片



Western blot - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

**Lane 1:** Wild type HAP1 whole cell lysate (20 µg)

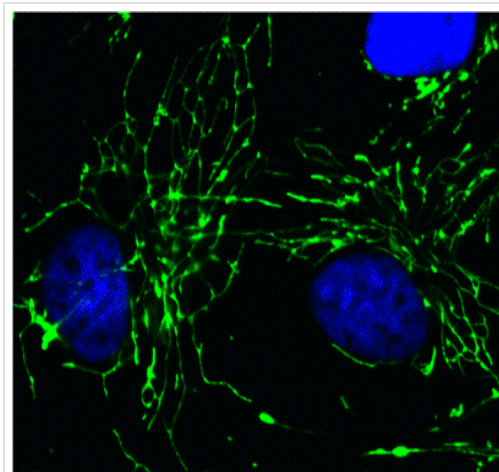
**Lane 2:** Cyclophilin F knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** HeLa whole cell lysate (20 µg)

**Lane 4:** Hek293 whole cell lysate (20 µg)

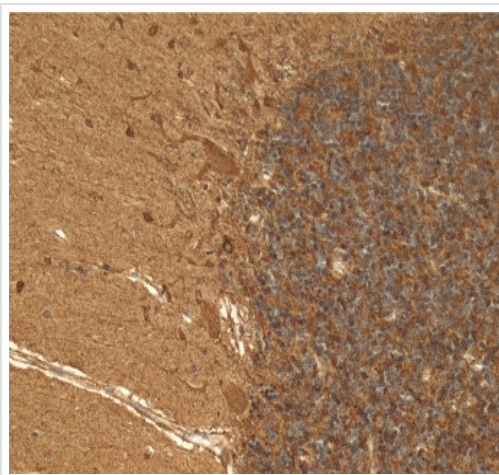
**Lanes 1 - 4:** Merged signal (red and green). Green - ab110324 observed at 24 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab110324 detected the expected band for Cyclophilin F in wild type HAP1 cells and the band was not seen in Cyclophilin F knockout HAP1 cells. Wild-type and Cyclophilin F knockout samples were subjected to SDS-PAGE. Ab110324 and **ab181602** (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

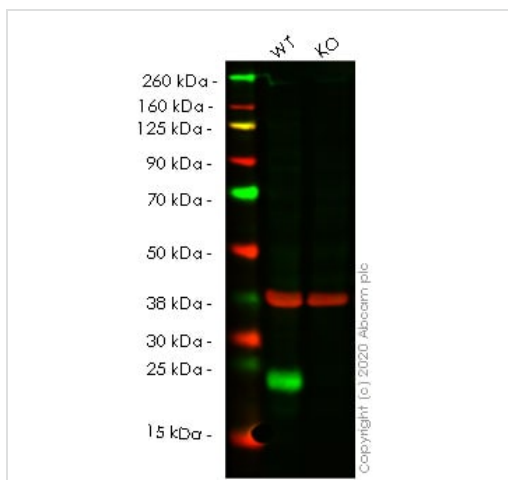
Immunocytochemistry analysis using ab110324 at 1µg/ml staining Cyclophilin 40 in Cultured Human embryonic lung-derived fibroblasts (strain MRC5), (fixed, treated for heat-induced antigen retrieval, permeabilized) followed by an AlexaFluor® 488-conjugated-goat-anti-mouse IgG1 isotype specific secondary antibody (2 µg/ml).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

Immunohistological analysis using ab110324 at 1µg/ml staining Cyclophilin F in Human cerebellum tissue (Formalin-fixed, Paraffin-embedded).

Note: immunoactivity is most intense in neuronal cell bodies, most notably in the large Purkinje cells.



Western blot - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

**All lanes** : Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324) at 1/10000 dilution

**Lane 1** : Wild-type HEK-293T cell lysate

**Lane 2** : PPIF knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

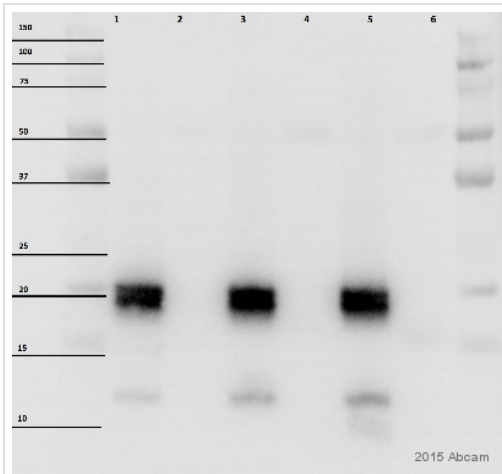
**Predicted band size:** 22 kDa

**Observed band size:** 23 kDa

**Lanes 1-2:** Merged signal (red and green). Green - ab110324 observed at 23 kDa. Red - Anti-GAPDH antibody[EPR16891] - Loading Control (**ab181602**) observed at 37 kDa.

ab110324 was shown to react with Cyclophilin F in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266077** (knockout cell lysate **ab257039**) was

used. Wild-type HEK-293T and PPIF knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab110324 and Anti-GAPDH antibody[EPR16891] - Loading Control (**ab181602**) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye®800CW) preadsorbed (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye®680RD) preadsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Cyclophilin F antibody  
[E11AE12BD4] (ab110324)

This image is courtesy of an anonymous Abreview

**All lanes** : Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)  
at 1/1000 dilution

**Lane 1** : WT mouse liver mitochondria lysate at 25 µg

**Lane 2** : CypD KO mouse liver mitochondria lysate at 25 µg

**Lane 3** : WT mouse liver mitochondria lysate at 35 µg

**Lane 4** : CypD KO mouse liver mitochondria lysate at 35 µg

**Lane 5** : WT mouse liver mitochondria lysate at 50 µg

**Lane 6** : CypD KO mouse liver mitochondria lysate at 50 µg

#### Secondary

**All lanes** : HRP-conjugated goat anti-mouse IgG polyclonal at  
1/4000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 22 kDa

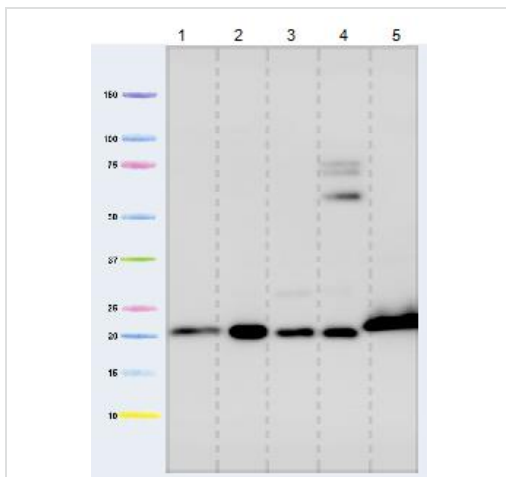
**Observed band size:** 20 kDa

**Additional bands at:** 13 kDa (possible non-specific binding)

**Exposure time:** 5 seconds

Blocked with 5% milk for 1 hour at 25°C.

Incubated with the primary antibody diluted in PBS-T + 5% milk for  
16 hours at 4°C.



Western blot - Anti-Cyclophilin F antibody  
[E11AE12BD4] (ab110324)

**All lanes** : Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)  
at 1 µg/ml

**Lane 1** : Isolated mitochondria from Human heart at 5 µg

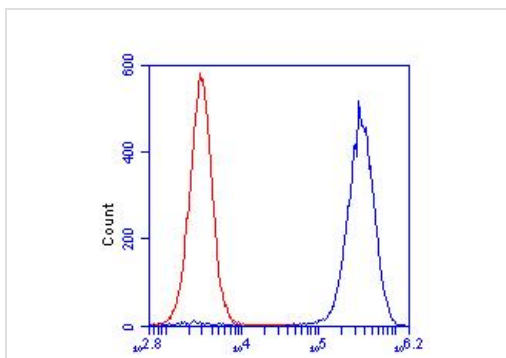
**Lane 2** : Isolated mitochondria from Bovine heart at 1 µg

**Lane 3** : Isolated mitochondria from Rat heart at 10 µg

**Lane 4** : Isolated mitochondria from Mouse heart at 10 µg

**Lane 5** : Isolated mitochondria from HepG2 cells at 20 µg

**Predicted band size:** 22 kDa



Flow Cytometry - Anti-Cyclophilin F antibody  
[E11AE12BD4] (ab110324)

Flow cytometric analysis using ab110324 at 1µg/ml staining  
Cyclophilin F in HL60 cells (blue). Isotype control antibody (red).

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