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Product datasheet

Anti-Cyclophilin F antibody [E11AE12BD4] ab110324

KO 評価済

4 Abreviews 96 References 画像数 7

製品の概要

製品名	Anti-Cyclophilin F antibody [E11AE12BD4]
製品の詳細	Mouse monoclonal [E11AE12BD4] to Cyclophilin F
由来種	Mouse
アプリケーション	**適用あり:** WB, Flow Cyt, ICC/IF, IHC-P
種交差性	**交差種:** Mouse, Rat, Cow, Human
免疫原	Recombinant full length protein corresponding to Rat Cyclophilin F aa 1-206. (also known as CypD)
ポジティブ・コントロール	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.
特記事項	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. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.4 Preservative: 0.02% Sodium azide

	Constituent: HEPES buffered saline
特記事項（精製）	ab110324 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
ポリ/モノ	モノクローナル
クローン名	E11AE12BD4
アイソタイプ	IgG1
軽鎖の種類	kappa

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab110324の使用に適用されます**

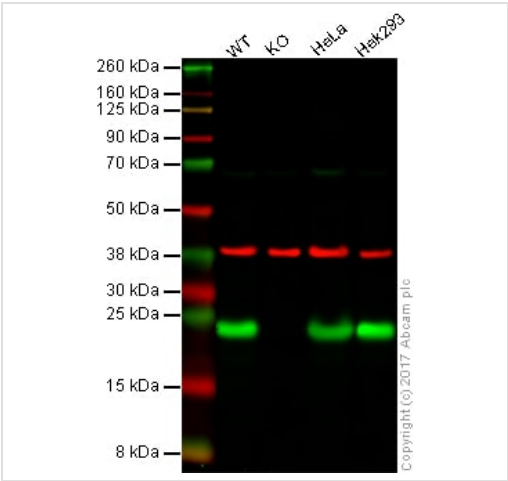
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Predicted molecular weight: 22 kDa.
Flow Cyt		Use a concentration of 1 µg/ml. **ab170190** - 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.

ターゲット情報

機能	PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.
配列類似性	Belongs to the cyclophilin-type PPIase family. Contains 1 PPIase cyclophilin-type domain.
細胞内局在	Mitochondrion matrix.
製品の状態	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.

画像

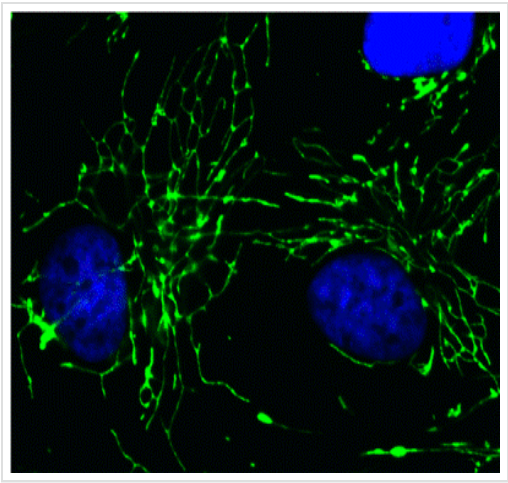


Western blot - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

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)

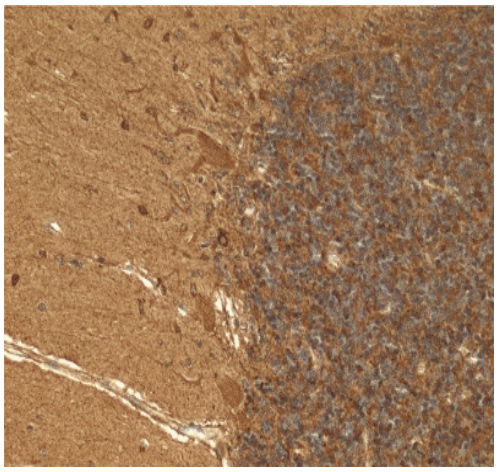
Lanes 1 - 4: Merged signal (red and green). Green - ab110324 observed at 24 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

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 ug/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.



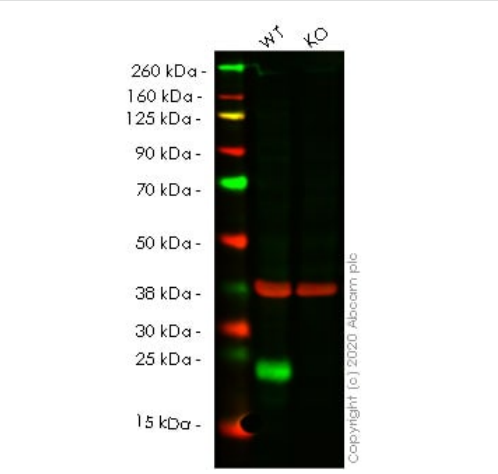
Immunocytochemistry/ Immunofluorescence - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

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.

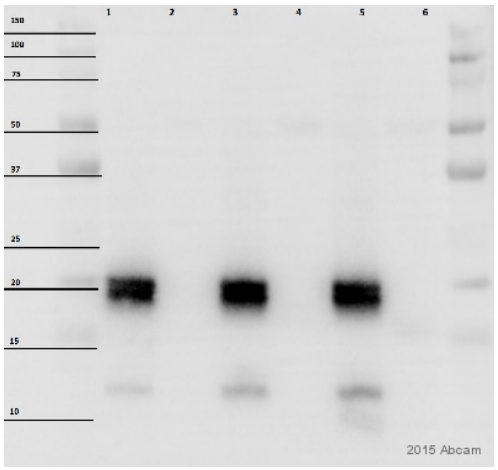
Performed under reducing conditions.

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.

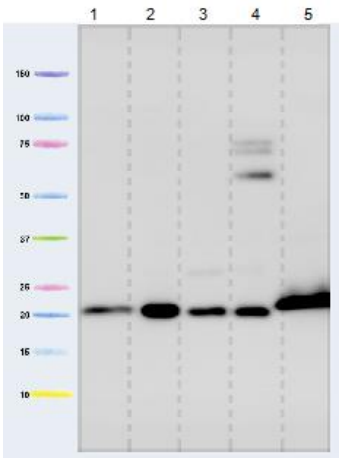
Performed under reducing conditions.

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.

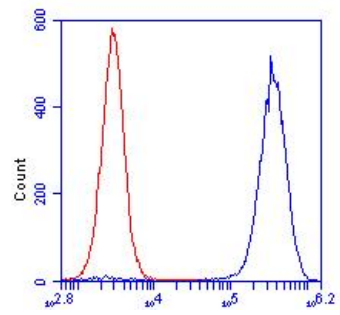


Western blot - Anti-Cyclophilin F antibody [E11AE12BD4] (ab110324)

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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