# abcam

## Product datasheet

# Anti-Cytochrome C antibody [EPR1327] ab133504

יעלאעבע RabMAb

★★★★★ 2 Abreviews 197 References 画像数 14

#### 製品の概要

製品名 Anti-Cytochrome C antibody [EPR1327]

製品の詳細 Rabbit monoclonal [EPR1327] to Cytochrome C

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF, IP 種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Cytochrome C aa 1-100. The exact sequence is proprietary.

Database link: P99999

ポジティブ・コントロール WB: Human fetal kidney and fetal heart tissue lysate. Rat and mouse brain tissue lysate. Molt4

> and SH-SY5Y cell lysate. Human heart, kidney and spleen lysate. ICC/IF: SH-SY5Y and HeLa cells. IHC-P: Human cervical carcinoma tissue. Mouse liver tissue. Human and rat kidney tissue.

IP: Molt-4 cells.

This product is a recombinant monoclonal antibody, which offers several advantages including: 特記事項

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

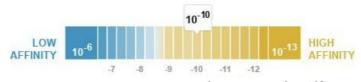
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

解離定数(KD値)  $K_D = 1.29 \times 10^{-10} M$ 



Learn more about K<sub>D</sub>

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル **クローン名** EPR1327

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab133504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	<b>★★★★</b> <u>(1)</u>	1/5000. Detects a band of approximately 14 kDa (predicted molecular weight: 11 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  See IHC antigen retrieval protocols.
ICC/IF	**** (1)	1/100.
IP		1/30.

#### ターゲット情報

機能 Electron carrier protein. The oxidized form of the cytochrome c heme group can accept an

electron from the heme group of the cytochrome c1 subunit of cytochrome reductase. Cytochrome c then transfers this electron to the cytochrome oxidase complex, the final protein carrier in the

mitochondrial electron-transport chain.

Plays a role in apoptosis. Suppression of the anti-apoptotic members or activation of the proapoptotic members of the Bcl-2 family leads to altered mitochondrial membrane permeability resulting in release of cytochrome c into the cytosol. Binding of cytochrome c to Apaf-1 triggers the activation of caspase-9, which then accelerates apoptosis by activating other caspases.

**関連疾患** Defects in CYCS are the cause of thrombocytopenia type 4 (THC4) [MIM:612004]; also known as

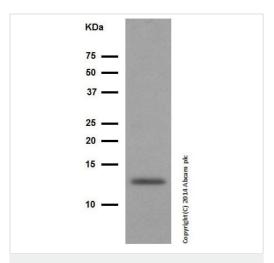
autosomal dominant thrombocytopenia type 4. Thrombocytopenia is the presence of relatively few platelets in blood. THC4 is a non-syndromic form of thrombocytopenia. Clinical manifestations of thrombocytopenia are absent or mild. THC4 may be caused by dysregulated platelet formation.

**配列類似性** Belongs to the cytochrome c family.

翻訳後修飾 Binds 1 heme group per subunit.

細胞内局在 Mitochondrion matrix.

#### 画像



Western blot - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Anti-Cytochrome C antibody [EPR1327] (ab133504) at 1/5000 dilution (purified) + Human fetal kidney tissue lysate at 10 µg

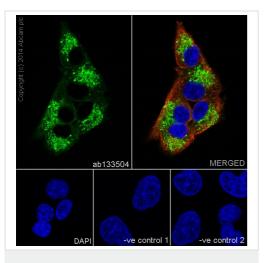
#### Secondary

HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 11 kDa **Observed band size:** 14 kDa

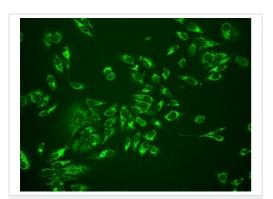
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



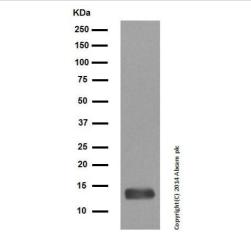
Immunocytochemistry/ Immunofluorescence - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Immunofluorescence staining of SH-SY5Y cells with purified ab133504 at a working dilution of 1 in 100, counter-stained with DAPI. The secondary antibody was Alexa Fluor<sup>®</sup> 488 goat anti rabbit (ab150077), used at a dilution of 1 in 500. ab7291 was used to stain tubulin, and this is shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative control is shown in bottom middle and right hand panels - for the negative controls, purified ab133504 was used at a dilution of 1/200 followed by an Alexa Fluor<sup>®</sup> 594 goat anti-mouse antibody at a dilution of 1/500.

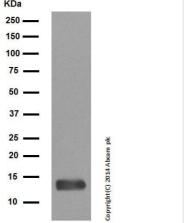


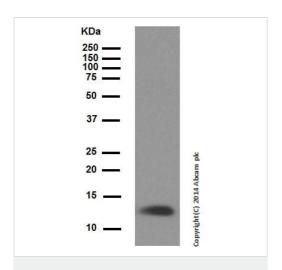
Immunocytochemistry/ Immunofluorescence - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Immunofluorescent analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labelling Cytochrome C with unpurified ab133504 at 1/100 dilution.



Western blot - Anti-Cytochrome C antibody [EPR1327] (ab133504)





Western blot - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Anti-Cytochrome C antibody [EPR1327] (ab133504) at 1/5000 dilution (purified) + Rat brain tissue lysate at 1/1000 dilution

Anti-Cytochrome C antibody [EPR1327] (ab133504) at 1/5000

dilution (purified) + Human fetal heart tissue lysate at 10 µg

HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 11 kDa

Observed band size: 14 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST

#### Secondary

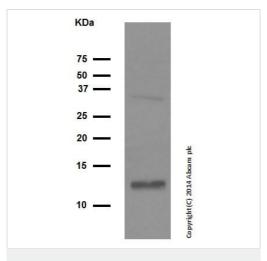
Secondary

HRP goat anti-rabbit (H+L) at 1/1000 dilution

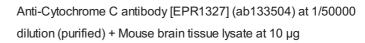
Predicted band size: 11 kDa Observed band size: 14 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Cytochrome C antibody [EPR1327] (ab133504)



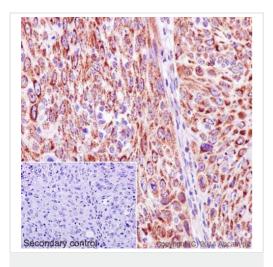
#### Secondary

HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 11 kDa **Observed band size:** 14 kDa

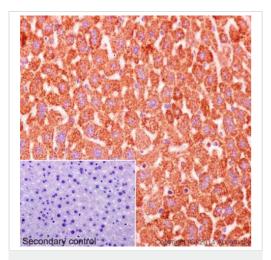
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



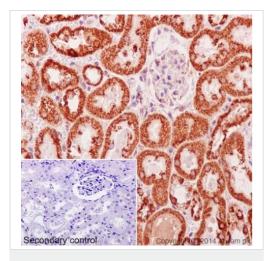
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Immunohistochemical staining of paraffin embedded human cervical carcinoma with purified ab133504 at a working dilution of 1 in 500. The secondary antibody used is a HRP goat anti-rabbit H+L (ab97051). The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



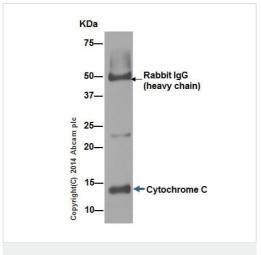
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Immunohistochemical staining of paraffin embedded mouse liver with purified ab133504 at a working dilution of 1 in 500. The secondary antibody used is a HRP goat anti-rabbit H+L (ab97051). The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

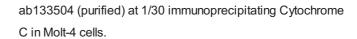


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome C antibody
[EPR1327] (ab133504)

Immunohistochemical staining of paraffin embedded rat kidney with purified ab133504 at a working dilution of 1 in 500. The secondary antibody used is a HRP goat anti-rabbit H+L (ab97051). The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

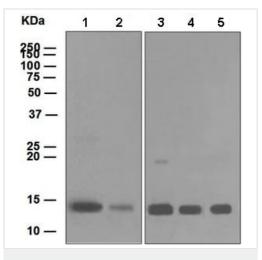


Immunoprecipitation - Anti-Cytochrome C antibody [EPR1327] (ab133504)



For western blotting, a HRP-conjugated goat anti-rabbit (H+L), was used as the secondary antibody (1/1000).

Blocking/Dilution buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-Cytochrome C antibody [EPR1327] (ab133504)

**All lanes :** Anti-Cytochrome C antibody [EPR1327] (ab133504) at 1/10000 dilution (unpurified)

Lane 1 : Molt4 lysate

Lane 2 : SH-SY5Y lysate

Lane 3 : Human heart lysate

Lane 4 : Human kidney lysate

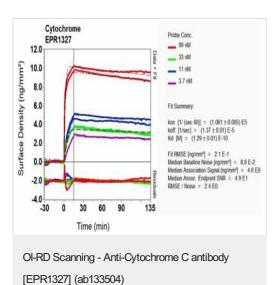
Lane 5 : Human spleen lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

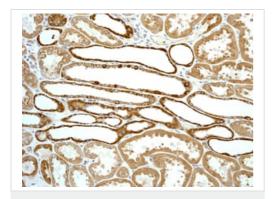
All lanes: Goat-anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 11 kDa **Observed band size:** 14 kDa



Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

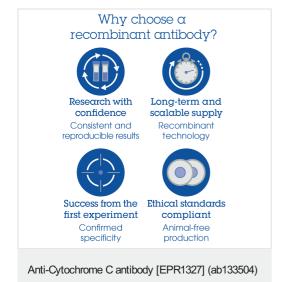
### Click here to learn more about K<sub>D</sub>



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytochrome C antibody [EPR1327] (ab133504)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labelling Cytochrome C with unpurified ab133504 at 1/250 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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