abcam

Product datasheet

Anti-Cyclin T1 antibody [EPR17982] ab184703

יעלאעבע RabMAb

★★★★★ 1 Abreviews 3 References 画像数 10

製品の概要

製品名 Anti-Cyclin T1 antibody [EPR17982]

製品の詳細 Rabbit monoclonal [EPR17982] to Cyclin T1

由来種 Rahhit

特異性 Note that the antibody detects the target protein from human cell lysates but not tissue lysates.

アプリケーション 適用あり: Flow Cyt (Intra), WB, ICC/IF, IP, IHC-P

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: K562, Jurkat, HeLa, HepG2, MCF7, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates;

> Mouse brain, kidney and spleen lysates; Rat brain and spleen lysates. IHC-P: Mouse liver and rat kidney tissues. ICC/IF: K562, NIH/3T3 and PC-12 cells. Flow Cyt (intra): NIH/3T3 cells. IP: PC-12

whole cell lysate.

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

- 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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EPR17982

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ab184703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
Flow Cyt (Intra)		1/120.
WB	★★★☆☆ (1)	1/1000. Detects a band of approximately 81 kDa (predicted molecular weight: 81 kDa).
ICC/IF		1/500.
IP		1/40.
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The IHC application is recommended for mouse and rat only.

ターゲット情報

機能 Regulatory subunit of the cyclin-dependent kinase pair (CDK9/cyclin-T1) complex, also called

positive transcription elongation factor B (P-TEFb), which is proposed to facilitate the transition from abortive to productive elongation by phosphorylating the CTD (carboxy-terminal domain) of the large subunit of RNA polymerase II (RNA Pol II). In case of HIV or SIV infections, binds to the transactivation domain of the viral nuclear transcriptional activator, Tat, thereby increasing Tat's affinity for the transactivating response RNA element (TAR RNA). Serves as an essential cofactor

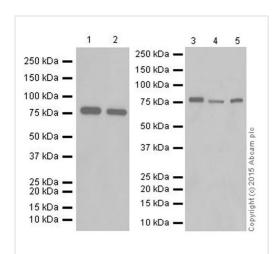
for Tat, by promoting RNA Pol II activation, allowing transcription of viral genes.

組織特異性 Ubiquitously expressed.

配列類似性 Belongs to the cyclin family. Cyclin C subfamily.

細胞内局在 Nucleus.

画像



Western blot - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

All lanes : Anti-Cyclin T1 antibody [EPR17982] (ab184703) at 1/1000 dilution

Lane 1 : K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

Lane 2 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 5 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

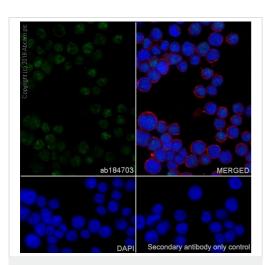
Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Predicted band size: 81 kDa **Observed band size:** 81 kDa

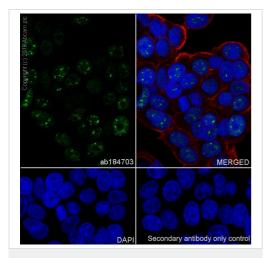
Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



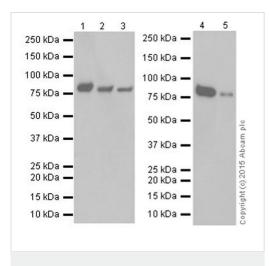
Immunocytochemistry/ Immunofluorescence - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

Ab184703 staining Cyclin T1 in Jurkat (human T cell leukemia T lymphocyte). Cells were fixed with 100% Methanol. Samples were incubated with primary antibody at 1/100 dilution (6.4 μ g/ml). An Alexa Fluor[®] 488 Goat anti-rabbit (**ab150077**) was used as the secondary antibody at 1/1000 dilution (2 μ g/ml). Ab195888, anti-alpha Tubulin [DM1A] – Microtubule Marker (Alexa Fluor[®] 594) was used as counterstain antibody at 1/200 dilution (2.5 μ g/ml). DAPI was used as a nuclear counterstain. Confocal image showing nuclear staining in Jurkat cell line.



Immunocytochemistry/ Immunofluorescence - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

Ab184703 staining Cyclin T1 in MCF7 (human breast adenocarcinoma epithelial cell). Cells were fixed with 100% Methanol. Samples were incubated with primary antibody at 1:100 dilution (6.4 μg/ml). An Alexa Fluor[®] 488 Goat anti-rabbit (ab150077) was used as the secondary antibody at 1/1000 dilution (2 μg/ml). Ab195888, anti-alpha Tubulin [DM1A] – Microtubule Marker (Alexa Fluor[®] 594) was used as counterstain antibody at 1/200 dilution (2.5 μg/ml). DAPI was used as a nuclear counterstain. Confocal image showing nuclear staining in MCF7 cell line.



Western blot - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

All lanes : Anti-Cyclin T1 antibody [EPR17982] (ab184703) at 1/1000 dilution

Lane 1: Mouse brain lysate

Lane 2: Mouse kidney lysate

Lane 3: Mouse spleen lysate

Lane 4: Rat brain lysate

Lane 5: Rat spleen lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at

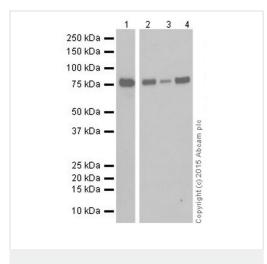
1/100000 dilution

Predicted band size: 81 kDa **Observed band size:** 81 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1,2 and 3: 15 seconds; Lane 4: 3 minutes.

The antibody did not detect the target protein from human tissues (WB or IHC) but the IHC application is recommended for mouse and rat. In addition the failure of human tissue WB might result from shortage of proper human tissue.



Western blot - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

All lanes : Anti-Cyclin T1 antibody [EPR17982] (ab184703) at 1/1000 dilution

Lane 1: C6 (Rat glial tumor cell line) whole cell lysate

Lane 2: RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 4: NIH/3T3 (Mouse embryo fibroblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

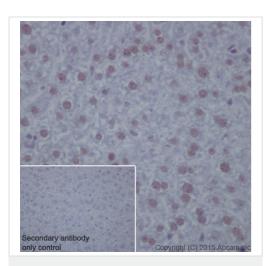
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 81 kDa **Observed band size:** 81 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2, 3 and 4: 15 seconds.

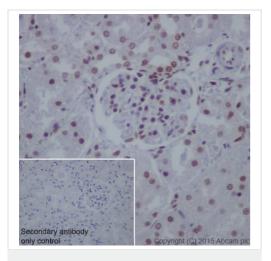


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin T1 antibody
[EPR17982] (ab184703)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Cyclin T1 with ab184703 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on hepatocytes of mouse liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

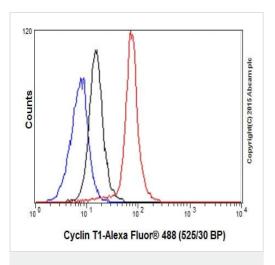


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cyclin T1 antibody
[EPR17982] (ab184703)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling Cyclin T1 with ab184703 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on rat kidney is observed. Counter stained with Hematoxylin.

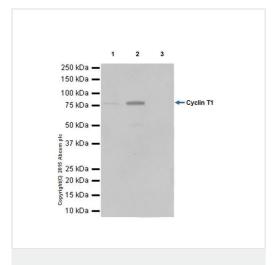
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling Cyclin T1 with ab184703 at 1/120 dilution (red) compared with a Rabbit IgG,monoclonal [EPR17982] -Isotype Control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Cyclin T1 antibody [EPR17982] (ab184703)

Cyclin T1 was immunoprecipitated from 1mg of PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate with ab184703 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab184703 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: PC-12 whole cell lysate 10µg (Input).

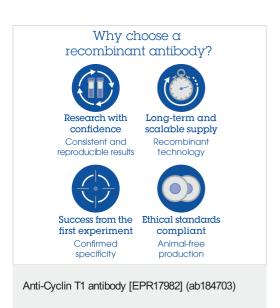
Exposure time: 30 seconds.

Lane 2: ab184703 IP in PC-12 whole cell lysate.

Lane 3: Rabbit lgG,monoclonal [EPR17982] - Isotpe Control (ab172730) instead of ab184703 in PC-12 whole cell lysate.

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

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