abcam

Product datasheet

Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker ab181598



RabMAb

★★★★★ 10 Abreviews 91 References

製品の概要

製品名 Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker

製品の詳細 Rabbit monoclonal [EPR17078] to Cytokeratin 7 - Cytoskeleton Marker

由来種 Rabbit

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

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: Rat bladder and kidney, mouse lung, kidney and liver tissue lysates and HeLa cell lysate.

IHC-P: Human mammary gland, mouse liver and rat liver tissue. IHC-F: Mouse kidney tissue.

ICC/IF: A549 cells. Flow Cyt (intra): A549 cells.

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, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR17078

アプリケーション

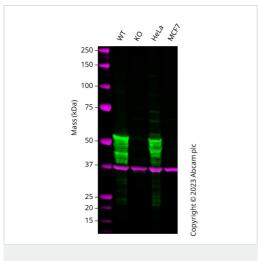
The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab181598の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-Fr	*** <u>*</u>	1/8000.
WB		1/1000. Detects a band of approximately 51, 45, 42 kDa (predicted molecular weight: 51 kDa).
IHC-P	****(8)	1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
Flow Cyt (Intra)		1/1500.

ターゲット情報

機能	Blocks interferon-dependent interphase and stimulates DNA synthesis in cells. Involved in the translational regulation of the human papillomavirus type 16 E7 mRNA (HPV16 E7).
組織特異性	Expressed in cultured epidermal, bronchial and mesothelial cells but absent in colon, ectocervix and liver. Observed throughout the glandular cells in the junction between stomach and esophagus but is absent in the esophagus.
配列類似性	Belongs to the intermediate filament family.
翻訳後修飾	Arg-20 is dimethylated, probably to asymmetric dimethylarginine.
細胞内局在	Cytoplasm.

画像



Western blot - Anti-Cytokeratin 7 antibody

[EPR17078] - Cytoskeleton Marker (ab181598)

All lanes : Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) at 1000 μg

Lane 1: Wild-type A549 cell lysate

Lane 2: KRT7 knockout A549 cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : MCF7 cell lysate

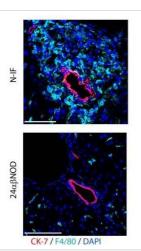
Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 51 kDa **Observed band size:** 40-55 kDa

Western blot: Anti-KRT7 antibody [EPR17078] (ab181598) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab181598 was shown to bind specifically to KRT7. A band was observed at 40-55 kDa in wildtype A549 cell lysates with no signal observed at this size in KRT7 knockout cell line. To generate this image, wild-type and KRT7 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 7 antibody
[EPR17078] - Cytoskeleton Marker (ab181598)

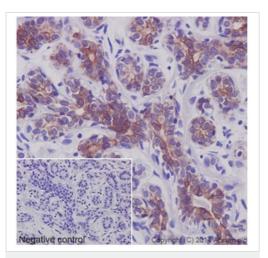
Fransen-Pettersson, N. et al PLoS One. 2016 Jul 21;11(7):e0159850. doi: 10.1371/journal.pone.0159850. eCollection 2016 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Hepatic inflammation and abnormal intrahepatic bile ducts in the N-IF mouse

Immunofluorescence staining of bile ducts (CK-7, red), macrophages (F4/80, light blue) and nuclei (DAPI, blue) in livers of 8 week old N-IF and 24 $\alpha\beta$ NOD control mice. Representative images from two independent experiments with a total of six mice are shown. Scale bars are 100 μ m.

Cytokeratin is detected with ab181598 at1/1500 dilution in formalin-fixed, paraffin-embedded mouse liver tissue. The secondary antibody is an Anti-Rabbit AlexaFluor[®]594 conjugate (red).

(From Figure 1D of Fransen-Pettersson, N. et al)



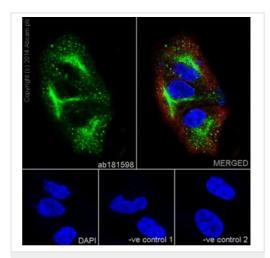
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 7 antibody

[EPR17078] - Cytoskeleton Marker (ab181598)

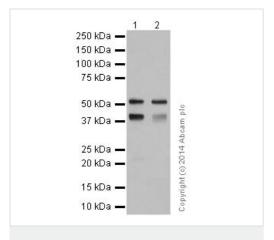
Immunohistochemical analysis of paraffin-embedded
Human mammary gland tissue labeling Cytokeratin 7 with
ab181598 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L
(HRP) <u>ab97051</u> at 1/500 dilution. Membrane and cytoplasmic
staining on epithelial cells of breast tissues is observed. Counter
stained with Hematoxylin.

Negative control: Using PBS instead of primary antibody.

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



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598)



Western blot - Anti-Cytokeratin 7 antibody

[EPR17078] - Cytoskeleton Marker (ab181598)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 A549 (Human lung carcinoma) cells labeling Cytokeratin 7 with ab181598 at 1/100 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/400 dilution (green). Cytoplasmic staining on A549 cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

ab181598 at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
 <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.

All lanes : Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) at 1/50000 dilution

Lane 1 : Rat bladder tissue
Lane 2 : Mouse lung tissue

Lysates/proteins at 10 µg per lane.

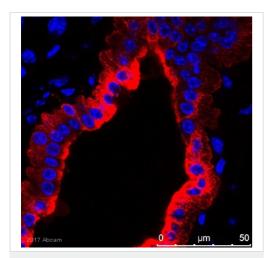
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 51 kDa **Observed band size:** 52, 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

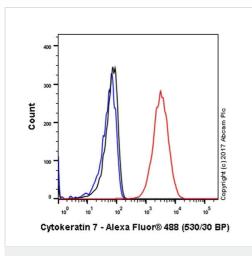
~45 and 42kDa bands are supported by the literature and competitor's products, which may be the isoforms.



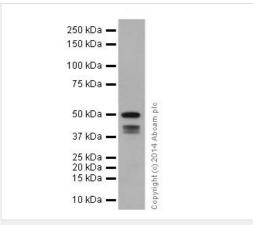
Immunohistochemical analysis of formaldehyde-fixed, frozen section of mouse salivary gland tissue labeling Cytokeratin 7 with ab181598 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG AlexaFluor[®]660.

Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598)

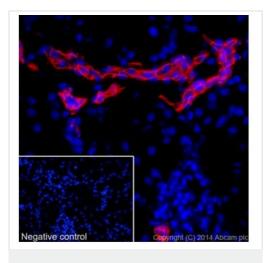
Image courtesy of Dr. Isabelle Miletich



Flow Cytometry (Intracellular) - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) Intracellular Flow Cytometry analysis of A549 (human lung carcinoma) cells labeling Cytokeratin 7 (red) with ab181598 at a 1/1500 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit lgG (Alexa Fluor[®] 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal lgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.



Western blot - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598)



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) at 1/1000 dilution + Mouse liver lysate at 10 μ g

Secondary

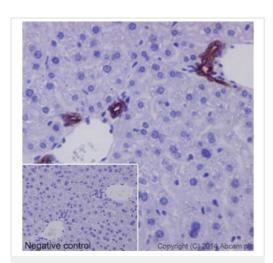
Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 51 kDa

~45 and 42kDa bands are supported by the literature and competitor's products, which may be the isoforms.

Immunohistochemical analysis of frozen Mouse kidney tissue labeling Cytokeratin 7 with ab181598 at 1/8000 dilution, followed by Donkey anti-rabbit Alexa Fluor 594 at 1/1000 dilution. Cytoplasmic staining on collecting tube is observed. This data is from our collaborator Dr. Hai Song's lab (Life Sciences Institute Zhejiang University). Counter stained with DAPI.

Negative control: Using PBS instead of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 7 antibody

[EPR17078] - Cytoskeleton Marker (ab181598)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Cytokeratin 7 with ab181598 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) <u>ab97051</u> at 1/500 dilution. On mouse liver, only bile duct epithelia are positive, no reaction in hepatocytes is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH

9.0 before commencing with IHC staining protocol.



Western blot - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598)

All lanes : Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) at 1/20000 dilution

Lane 1: HeLa (Human epithelial cells from cervix adenocarcinoma) cell lysate at 20 μg **Lane 2**: Rat kidney tissue lysate at 10 μg

Secondary

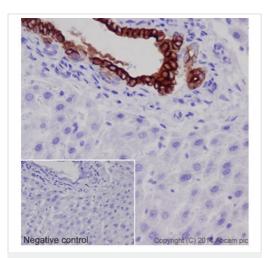
All lanes : Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 51 kDa

Observed band size: 51, 45, 42 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

~45 and 42kDa bands are supported by the literature and competitor's products, which may be the isoforms.

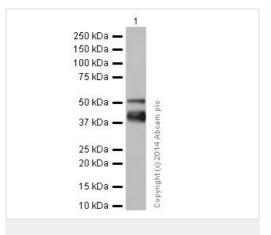


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 7 antibody
[EPR17078] - Cytoskeleton Marker (ab181598)

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Cytokeratin 7 with ab181598 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) <u>ab97051</u> at 1/500 dilution. On rat liver, only bile duct epithelia are positive, no reaction in hepatocytes is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary antibody.

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



Western blot - Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598)

Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker (ab181598) at 1/5000 dilution + Mouse kidney lysate at 10 μ g

Secondary

Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 51 kDa

Observed band size: 51, 45, 42 kDa

~45 and 42kDa bands are supported by the literature and competitor's products, which may be the isoforms.



Anti-Cytokeratin 7 antibody [EPR17078] -Cytoskeleton Marker (ab181598)

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