

Anti-Cytokeratin 18 antibody [E431-1] ab32118

リコンビナント RabMAb

★★★★☆ **6 Abreviews** **32 References** 画像数 17

製品の概要

製品名	Anti-Cytokeratin 18 antibody [E431-1]
製品の詳細	Rabbit monoclonal [E431-1] to Cytokeratin 18
由来種	Rabbit
特異性	Human Cytokeratin 18 (K18) was used as immunogen after isolation from cells pre-treated with okadaic acid or pervanadate to promote Tyr hyperphosphorylation.
アプリケーション	適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF
種交差性	交差種: Human
免疫原	Full length native protein (purified) corresponding to Human Cytokeratin 18.
ポジティブ・コントロール	WB: A431 cell lysate. IHC-P: Human gastric adenocarcinoma, kidney, colon, breast carcinoma, brain, stomach and glioma tissue. ICC/IF: HT-29 cells; HeLa cells; (negative: U87-MG cells). Flow Cyt (intra): MCF7 cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 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 E431-1
 アイソタイプ IgG

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ab32118の使用に適用されず**
 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)		1/20. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/2000. Detects a band of approximately 48 kDa (predicted molecular weight: 48 kDa). For unpurified use at 1/10000
IHC-P	★★★★★ (3)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100 - 1/500.

ターゲット情報

機能 Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (By similarity). When phosphorylated, plays a role in filament reorganization. Involved in the delivery of mutated CFTR to the plasma membrane. Together with KRT8, is involved in interleukin-6 (IL-6)-mediated barrier protection.

組織特異性 Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.

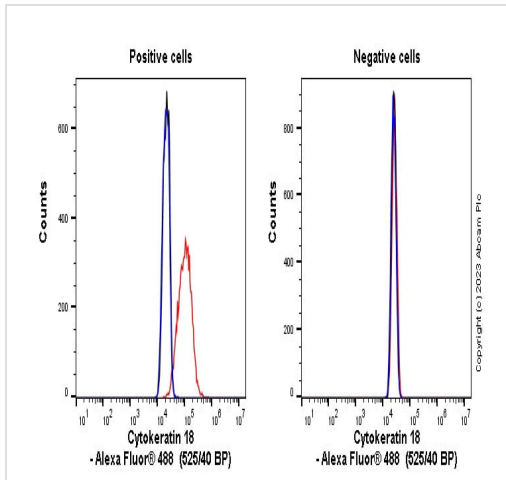
関連疾患 Defects in KRT18 are a cause of cirrhosis (CIRRH) [MIM:215600].

配列類似性 Belongs to the intermediate filament family.

翻訳後修飾 Phosphorylation at Ser-34 increases during mitosis. Hyperphosphorylated at Ser-53 in diseased cirrhosis liver. Phosphorylation increases by IL-6.
 Proteolytically cleaved by caspases during epithelial cell apoptosis. Cleavage occurs at Asp-238 by either caspase-3, caspase-6 or caspase-7.
 O-glycosylated at multiple sites; glycans consist of single N-acetylglucosamine residues.

細胞内局在 Cytoplasm > perinuclear region.

画像



Flow Cytometry (Intracellular) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

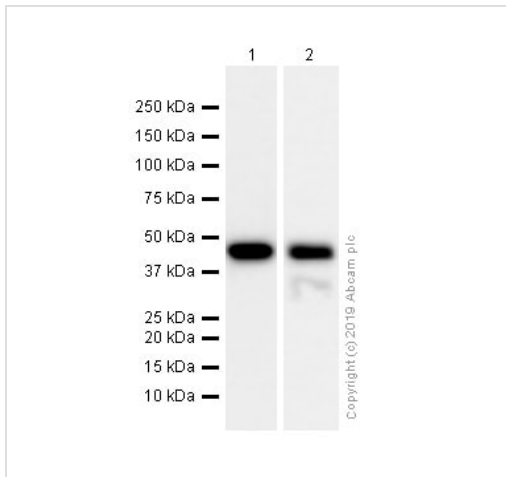
Flow cytometry overlay histogram showing left MCF7 positive cells and right negative A375 stained with ab32118 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab32118) (1×10^6 in 100 μ l at 0.008 μ g/ml (1/258750)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

This antibody gave a positive signal in MCF7 Fixed with 4% formaldehyde (10 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Western blot - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

All lanes : Anti-Cytokeratin 18 antibody [E431-1] (ab32118) at 1/2000 dilution (Purified)

Lane 1 : A431 (Human epidermoid carcinoma epithelial cell) whole cell lysates

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

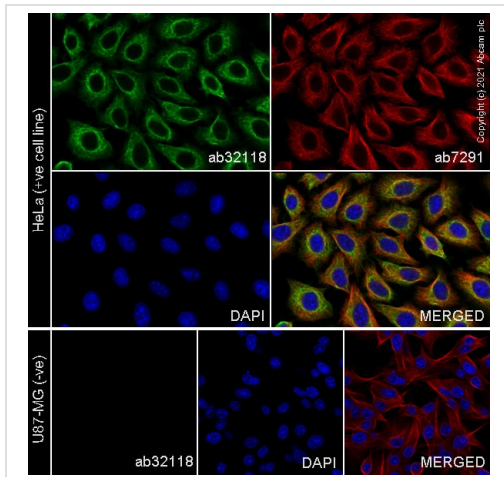
Lysates/proteins at 15 μ g per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 48 kDa

Observed band size: 48 kDa

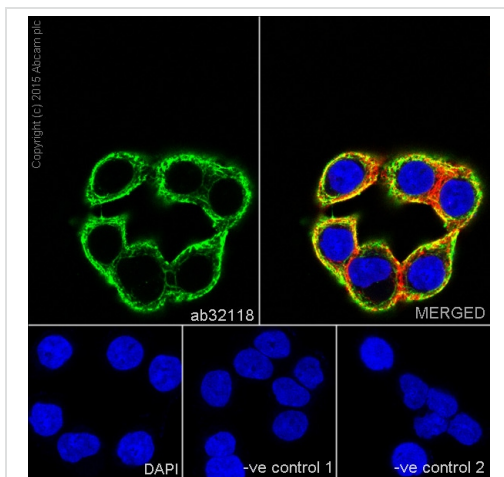


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Immunocytochemistry/Immunofluorescence analysis of HeLa (+ve) and U87-MG (-ve) cells labelling Cytokeratin 18 with ab32118 at 2 ug/ml overnight at +4°C. Cells were fixed with 100% Methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. A preadsorbed Alexa Fluor® 488-conjugated goat anti-rabbit IgG (**ab150081**) at 1/1000 dilution was used as the secondary antibody. The cells were co-stained with **ab7291**, a mouse anti-tubulin antibody (1/1000), using **ab150119**, a preadsorbed Alexa Fluor® 647-conjugated goat anti-mouse IgG (1/1000) as the secondary antibody. Nuclei were counterstained with DAPI (blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).



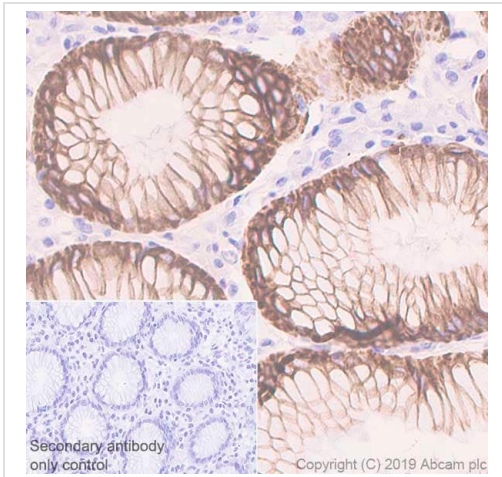
Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Immunocytochemistry/Immunofluorescence analysis of HT-29 cells labelling Cytokeratin 18 with purified ab32118 at 1/500. Cells were fixed with 100% Methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (**ab150077**) at 1/1000 dilution was used as the secondary antibody. The cells were co-stained with **ab7291**, a mouse anti-tubulin antibody (1/1000) using **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) as the secondary antibody. Nuclei were counterstained with DAPI (blue).

For negative control 1, rabbit primary antibody was used followed by anti-mouse secondary antibody (**ab150120**).

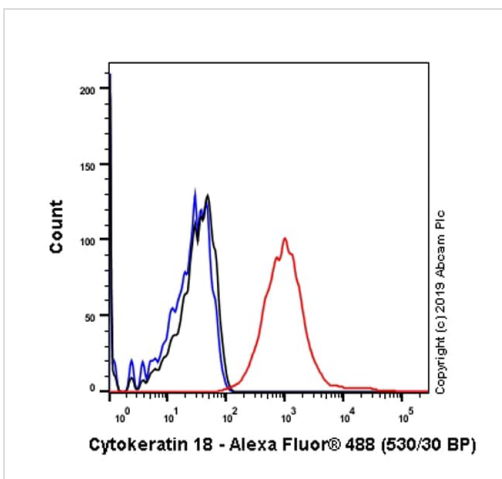
For negative control 2, mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**) were used.

Alexa Fluor® 488 (**ab194124**) conjugated version is available for this clone.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human stomach tissue sections labeling Cytokeratin 18 with purified ab32118 at 1/500 dilution (0.08 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

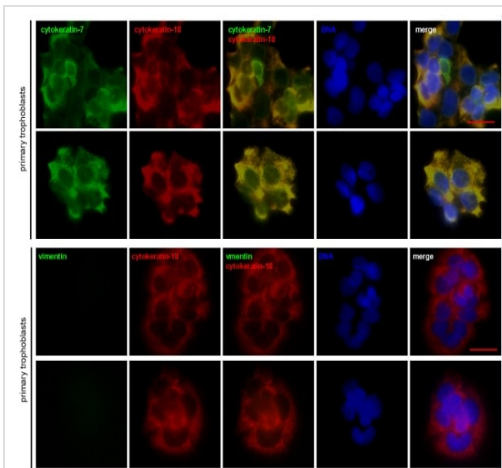
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)



Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Cytokeratin 18 with purified ab32118 at 1/20 dilution (2µg/ml) (red). Cells were fixed with 80% Methanol and permeabilised with 0.1% Tween-20. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

R-PE (**ab210410**) conjugated version is available for this clone.

Flow Cytometry (Intracellular) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

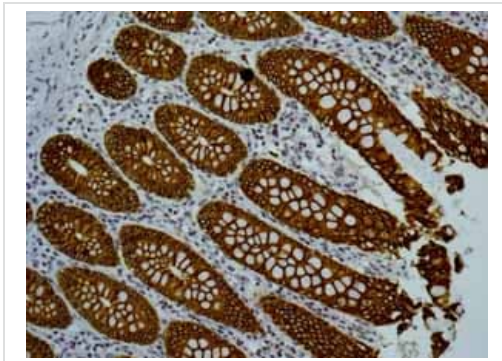


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Muschol-Steinmetz C. et al PLoS One. 2013 Sep 19;8(9):e73337. doi: 10.1371/journal.pone.0073337. eCollection 2013. Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>

Indirect immunofluorescence staining with antibodies against DNA, cytokeratin-7 and cytokeratin-18 (upper panel) or against DNA, vimentin and cytokeratin-18 (lower panel). Representatives are presented. Scale bar: 20 μ m.

Control or treated cells were fixed for 15 min with 4% PFA containing 0.1% Triton X-100 at room temperature. The following primary antibodies were used for staining: monoclonal mouse antibodies against vimentin and cytokeratin-7 (both 1:100, DAKO) and monoclonal rabbit antibody against cytokeratin-18 (1:50, Abcam). DNA was stained using DAPI (4',6-diamidino-2-phenylindole-dihydrochlorid) (Roche). Slides were examined using an Axio Imager 7.1 microscope (Zeiss) and images were taken using an Axio Cam MRm camera (Zeiss). The immunofluorescence stained slides were also examined by a confocal laser scanning microscope (CLSM) (Leica CTR 6500, Heidelberg). Images were processed using Photoshop.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

ab32118 showing positive staining in Normal colon tissue.

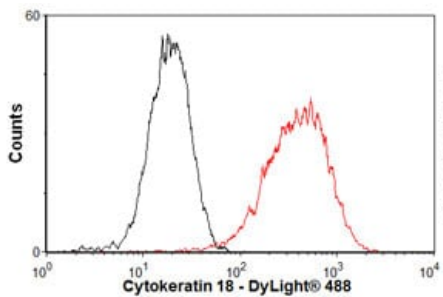


Western blot - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Anti-Cytokeratin 18 antibody [E431-1] (ab32118) at 1/10000 dilution + A431 cell lysate

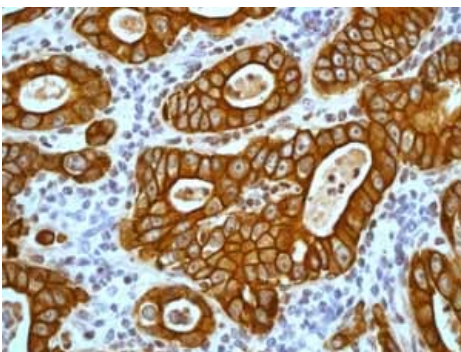
Predicted band size: 48 kDa

Observed band size: 48 kDa



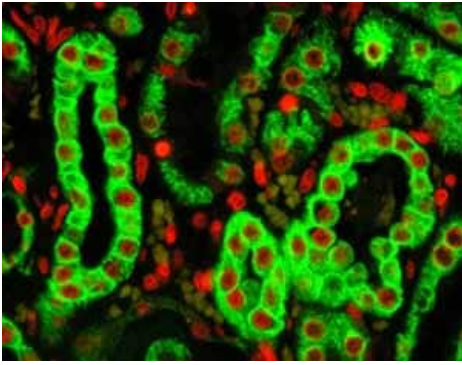
Flow Cytometry (Intracellular) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Overlay histogram showing MCF7 cells stained with ab32118 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32118, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in MCF7 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



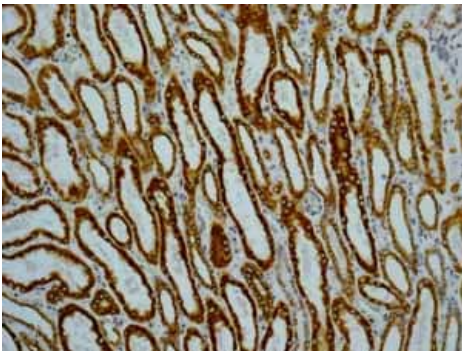
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

ab32118 showing positive staining in Gastric adenocarcinoma tissue.



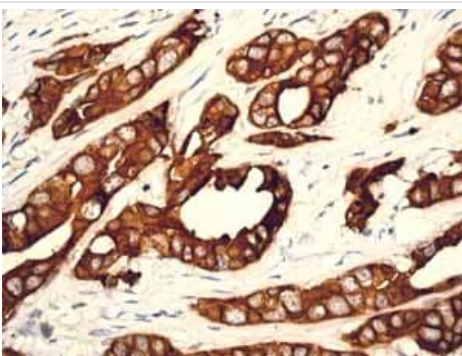
Fluorescent immunohistochemical analysis of paraffin-embedded human normal kidney tissue using ab32118. Green-CK18 red-PI

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)



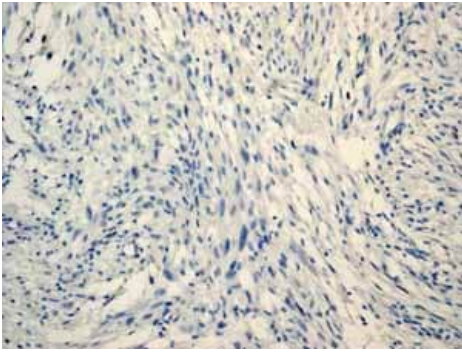
ab32118 showing positive staining in Normal kidney tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)



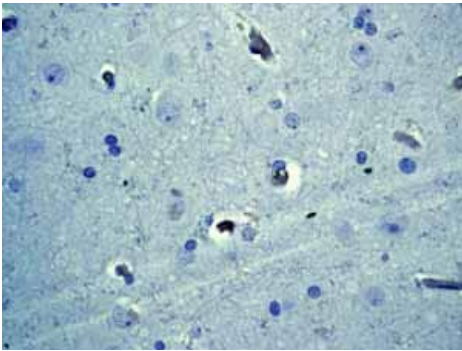
ab32118 showing positive staining in Breast carcinoma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)



ab32118 showing negative staining in Glioma tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)



ab32118 showing negative staining in Normal brain tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

Why choose a recombinant antibody?

- 

Research with confidence
Consistent and reproducible results
- 

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Anti-Cytokeratin 18 antibody [E431-1] (ab32118)

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