

# Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker ab52625

リコンビナント **RabMAb**

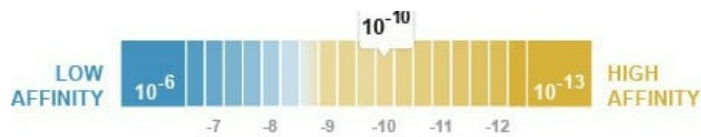
★★★★★ **12 Abreviews**   **195 References**   画像数 18

### 製品の概要

製品名	Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker
製品の詳細	Rabbit monoclonal [EP1580Y] to Cytokeratin 19 - Cytoskeleton Marker
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), mlHC, ICC/IF, WB, IHC-P <b>適用なし:</b> IP
種交差性	<b>交差種:</b> Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HepG2 and NIH/3T3 cell lysates. IHC-P: Human skin, breast carcinoma, kidney carcinoma, endometrial carcinoma and gastric adenocarcinoma tissues. ICC/IF: HepG2 and MCF-7 cells. Flow Cyt (intra): MCF-7 and HeLa cells. IHC-Fr: Mouse salivary gland tissue. mlHC: Human lung cancer, liver and pancreas tissues.
特記事項	<p>Abcam recommended secondaries - Goat Anti-Rabbit HRP (<b>ab205718</b>) and Goat Anti-Rabbit Alexa Fluor® 488 (<b>ab150077</b>). Or search our wide range of secondary antibodies for use with your experiment.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <b><a href="#">see here</a></b>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb® patents</a></b>.</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
解離定数 (K <sub>D</sub> 値)	K <sub>D</sub> = 3.70 x 10 <sup>-10</sup> M



[Learn more about K<sub>D</sub>](#)

バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 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	EP1580Y
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ab52625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)		1/30 - 1/80. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
mlHC		1/400.
ICC/IF	★★★★★ (3)	Use a concentration of 2 µg/ml. <b>For unpurified, use 1/50. Signal can be observed in cells fixed with either methanol or paraformaldehyde.</b> <b>This product gave a positive signal in MCF7 (-ve: SH-SY5Y) fixed with 100% methanol (5 min).</b>
WB	★★★★★ (1)	1/50000 - 1/200000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa). <b>For unpurified, use 1/10000 - 1/50000.</b>
IHC-P	★★★★★ (5)	1/400 - 1/800. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocol</a> . <b>For unpurified, use at 1/100.</b>

**追加情報** Is unsuitable for IP.

## ターゲット情報

**機能** Involved in the organization of myofibers. Together with KRT8, helps to link the contractile apparatus to dystrophin at the costameres of striated muscle.

## 組織特異性

Expressed in a defined zone of basal keratinocytes in the deep outer root sheath of hair follicles. Also observed in sweat gland and mammary gland ductal and secretory cells, bile ducts, gastrointestinal tract, bladder urothelium, oral epithelia, esophagus, ectocervical epithelium (at protein level). Expressed in epidermal basal cells, in nipple epidermis and a defined region of the hair follicle. Also seen in a subset of vascular wall cells in both the veins and artery of human umbilical cord, and in umbilical cord vascular smooth muscle. Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma in structures that contain dystrophin and spectrin.

## 配列類似性

Belongs to the intermediate filament family.

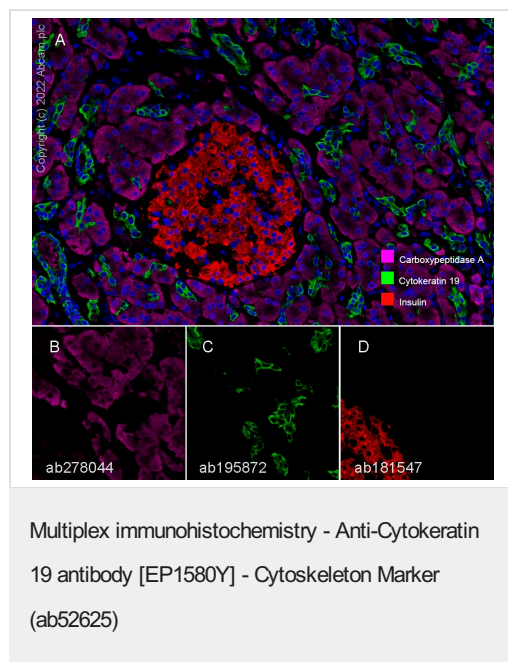
## 発生段階

Present in hair follicles at all stages of development.

## ドメイン

This keratin differs from all other IF proteins in lacking the C-terminal tail domain.

## 画像



Fluorescence multiplex immunohistochemical analysis of the human pancreas (Formalin/PFA-fixed paraffin-embedded sections).

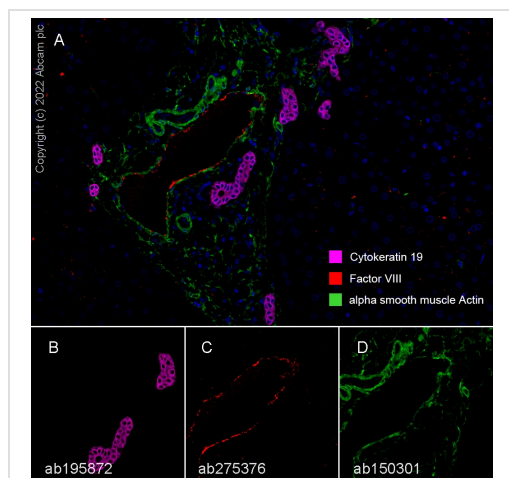
Panel A: merged staining of anti-Carboxypeptidase A ([ab278044](#), magenta; Opal™690), anti-Cytokeratin 19 ([ab195872](#), green; Opal™520) and anti-Insulin ([ab181547](#), red; Opal™570) on human pancreas. Panel B: anti-Carboxypeptidase A stained on acinar cells. Panel C: anti-Cytokeratin 19 stained on centroacinar cells and ducts. Panel D: anti-Insulin stained on beta cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of [ab278044](#) at 1/4000 dilution (0.135 µg/ml), [ab195872](#) at 1/8000 dilution (0.127 µg/ml), and [ab181547](#) at 1/20000 dilution (0.053 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.

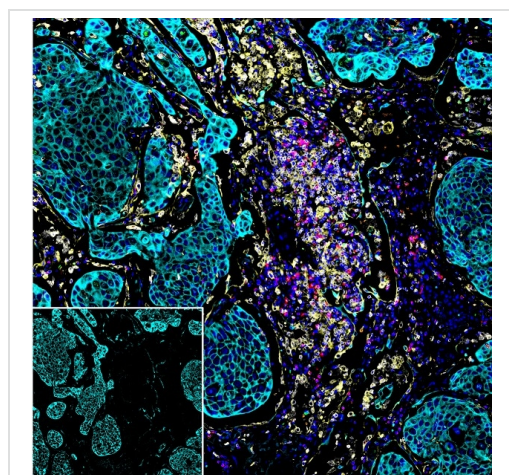
This data was developed using [ab195872](#), the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Fluorescence multiplex immunohistochemical analysis of human liver tissue (formalin-fixed paraffin-embedded section). Panel A shows merged staining of **ab195872** anti-Cytokeratin 19 stained on branch of bile ducts (magenta; Opal™690) at 1:8000 (0.127 µg/ml) [Panel B], **ab275376** anti-Factor VIII stained on endothelial cells (red; Opal™570) at 1:1000 (0.457 µg/ml) [Panel C], and **ab150301** anti-alpha smooth muscle Actin stained on smooth muscles (green; Opal™520) at 1:200 (0.14 µg/ml) [Panel C] on human liver. DAPI was used as a nuclear counter stain. Followed by Opal Polymer HRP Ms + Rb secondary. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of **ab195872** for 30 mins, **ab275376** for 30 mins and **ab150301** for 10 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins was used.

This data was developed using **ab195872**, the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

This image is courtesy of TissueGnostics Asia Pacific Limited

10-color fluorescence multiplex immunohistochemical analysis of human lung cancer tissue (formalin-fixed paraffin-embedded section).

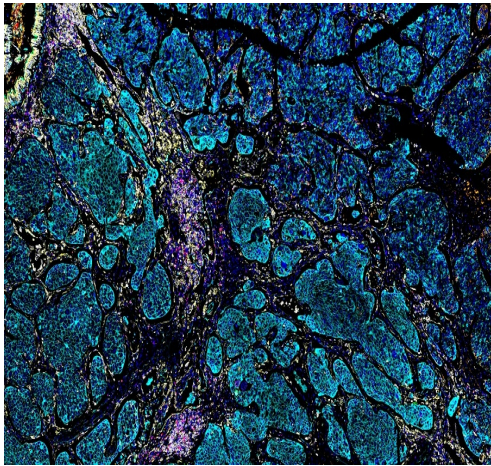
Merged staining of anti-FOXP3 (**ab215206**; Cyan; TG540N), anti-PD1 (**ab52587**; Red; TG700N), anti-CD163 (**ab182422**; Brown; TG650N), anti-HLA-DR (**ab92511**; Yellow; TG570N), anti-CD4 (**ab133616**; Violet; TG620N), anti-CD8 alpha (**ab101500**; Purple; TG540S), anti-CD20 (**ab9475**; Grey; TG660S), anti-CD68 (**ab192847**; Green; TG520N), anti-Cytokeratin 19 (**ab52625**; Light blue; TG440N). TG470SN (dark blue) was used as a nuclear counter stain. The inset image shows the separate Cytokeratin 19 signal.

The section was incubated in nine rounds of staining; in the order of **ab215206** (1/100 dilution), **ab52587** (1/200 dilution), **ab182422** (1/300 dilution), **ab92511** (1/200 dilution), **ab133616** (1/600 dilution), **ab101500** (1/300 dilution), **ab9475** (1/100 dilution), **ab192847** (1/300 dilution), **ab52625** (1/400 dilution); each using a

separate fluorescent tyramide signal amplification system.

Sodium citrate antigen retrieval (pH6.0) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity.

Image acquisition was performed with TissueFAXS Spectra (TissueGnostics).



Multiplex immunohistochemistry - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

This image is courtesy of TissueGnostics Asia Pacific Limited

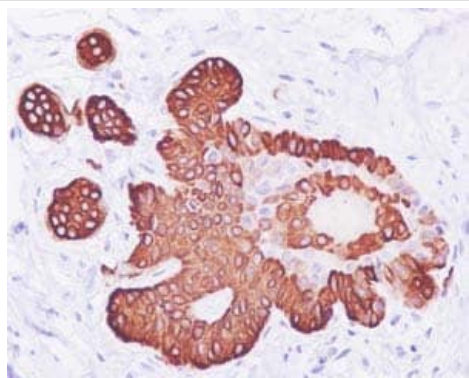
10-color fluorescence multiplex immunohistochemical analysis of human lung cancer tissue (formalin-fixed paraffin-embedded section).

Merged staining of anti-FOXP3 (**ab215206**; Cyan; TG540N), anti-PD1 (**ab52587**; Violet; TG700N), anti-CD163 (**ab182422**; Red; TG650N), anti-HLA-DR (**ab92511**; Yellow; TG570N), anti-CD4 (**ab133616**; Orange; TG620N), anti-CD8 alpha (**ab101500**; Purple; TG540S), anti-CD20 (**ab9475**; Grey; TG660S), anti-CD68 (**ab192847**; Green; TG520N), anti-Cytokeratin 19 (**ab52625**; Light blue; TG440N). TG470SN (dark blue) was used as a nuclear counter stain.

The section was incubated in nine rounds of staining; in the order of **ab215206** (1/100 dilution), **ab52587** (1/200 dilution), **ab182422** (1/300 dilution), **ab92511** (1/200 dilution), **ab133616** (1/600 dilution), **ab101500** (1/300 dilution), **ab9475** (1/100 dilution), **ab192847** (1/300 dilution), **ab52625** (1/400 dilution); each using a separate fluorescent tyramide signal amplification system.

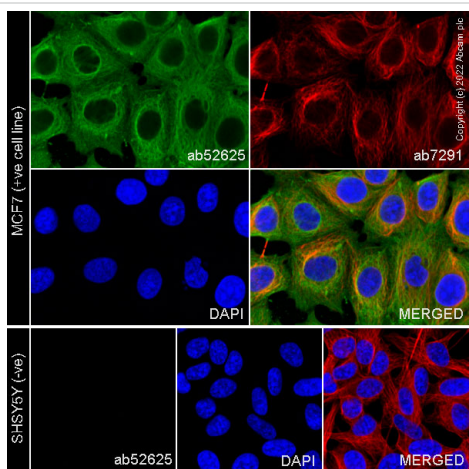
Sodium citrate antigen retrieval (pH6.0) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity.

Image acquisition was performed with TissueFAXS Spectra (TissueGnostics).



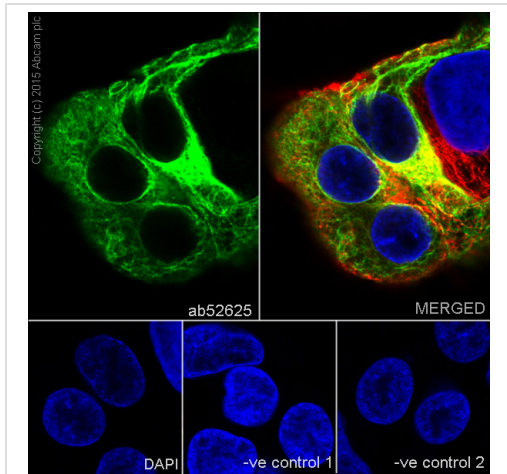
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Immunohistochemical staining of paraffin-embedded human skin with purified ab52625 at a dilution of 1/400. A pre-diluted HRP polymer for rabbit/mouse IgG was used as the secondary antibody and the sample was 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.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

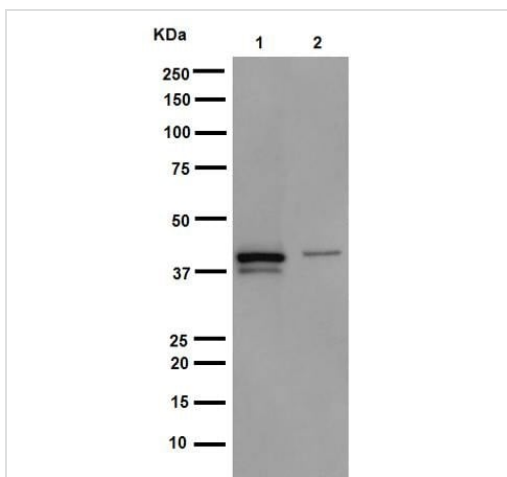
ab52625 staining KRT19 in MCF7 cells, with negative expression in SHSY5Y cells. The cells were fixed with 100% methanol (5 min), permeabilised with 0.1% Triton x-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab52625 at 2 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin at 0.5 µg/ml. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150119**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 647), pre-adsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown. This product also work with 4% formaldehyde (10 min) fixation under the same testing conditions.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Immunocytochemistry/Immunofluorescence analysis of HepG2 (human liver hepatocellular carcinoma cell line) cells labelling Cytokeratin 19 (green) with purified ab52625 at 1/500. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were counter-stained with **ab7291**, anti-Tubulin (mouse mAb) at 1/1000 followed by **ab150120** Alexa Fluor® 594 goat anti-mouse secondary (1/1000). Nuclei were counterstained with DAPI (blue). For negative control 1, rabbit primary antibody and anti-mouse secondary antibody (**ab150120**) were used. For negative control 2, **ab7291** (mouse primary antibody) was used followed by anti-rabbit secondary antibody (**ab150077**).

Alexa Fluor® 488 (**ab192643**) and Alexa Fluor® 647 (**ab192980**) conjugated versions are available for this clone.



Western blot - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

**All lanes :** Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625) at 1/45000 dilution (purified)

**Lane 1 :** HepG2 (liver hepatocellular carcinoma cell line) cell lysate

**Lane 2 :** NIH/3T3 (mouse embryo fibroblast cell line) cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

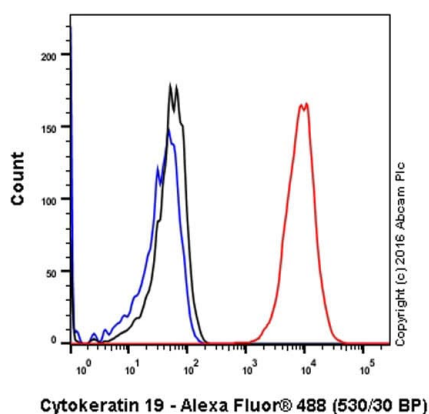
**All lanes :** HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 44 kDa

**Observed band size:** 40 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



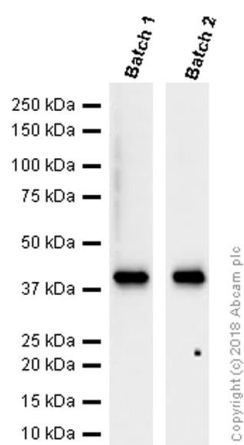
Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

ab52625 staining Cytokeratin 19 in the human cell line MCF-7 (human breast carcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permeabilized with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/80. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isootype control: Rabbit monoclonal IgG (Black)

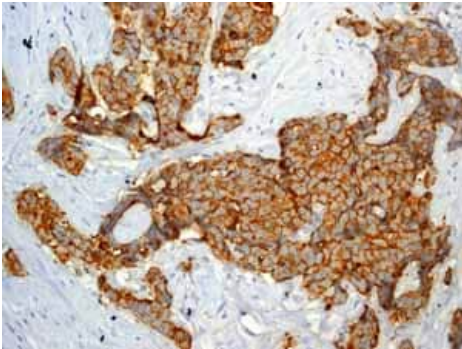
Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue).

Alexa Fluor® 488 ([ab192643](#)) and Alexa Fluor® 647 ([ab192980](#)) conjugated versions are available for this clone.



Western blot - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

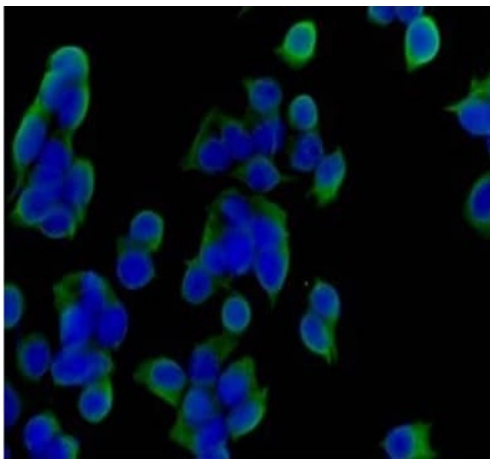
Different batches of ab52625 were tested on HepG2 (Human hepatocellular carcinoma epithelial cell) lysate at 0.2 µg/ml. 15 µg of lysate was loaded in each lane. Bands observed at 40 kDa.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

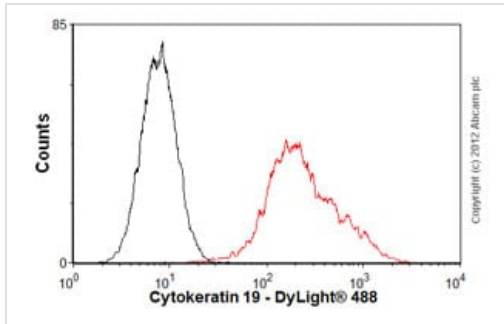
Unpurified ab52625 showing positive staining in Breast carcinoma tissue.

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



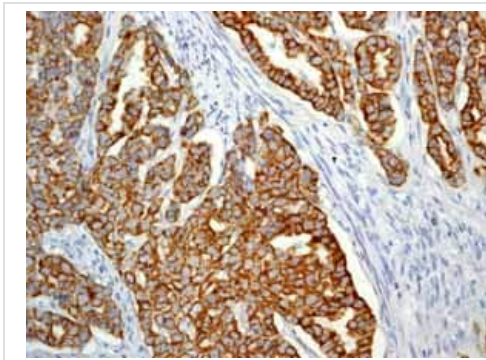
Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Immunofluorescent staining of MCF-7 cells (fixed in 4% PFA, permeabilized with 0.1% Triton X 100) using purified ab52625 at a dilution of 1/200. An Alexa Fluor® 488 goat anti-rabbit antibody was used as the secondary at a dilution of 1/200 and the cells were counter stained with DAPI.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

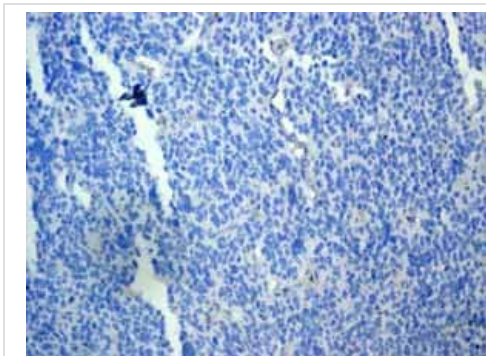
Overlay histogram showing HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained with unpurified ab52625 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab52625, 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/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Unpurified ab52625 showing positive staining in Endometrial carcinoma tissue.

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

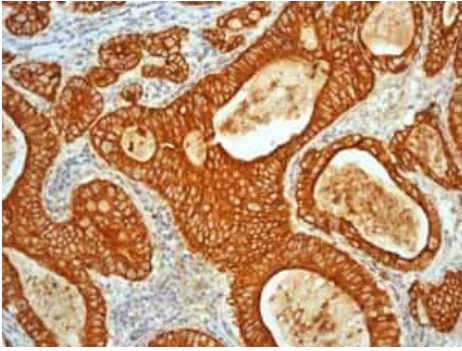
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)



Unpurified ab52625 showing negative staining in Glioma tissue.

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

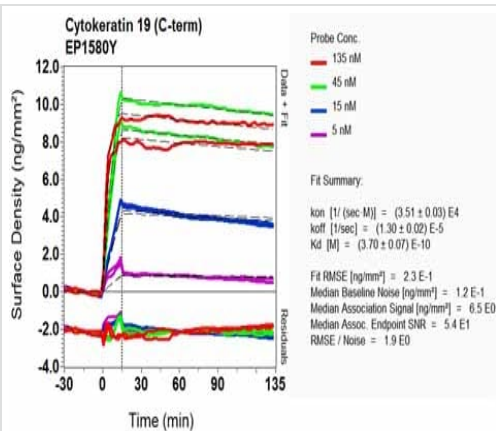
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Unpurified ab52625 showing positive staining in Gastric adenocarcinoma tissue.

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



BIORAD Scanning - Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

Why choose a recombinant antibody?



Anti-Cytokeratin 19 antibody [EP1580Y] - Cytoskeleton Marker (ab52625)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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