

# Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free ab220804

敲除验证 重组 RabMAb

[2 References](#) [8 图像](#)

### 概述

产品名称	Anti-Cytokeratin 7抗体[EPR17078] - BSA and Azide free
描述	兔单克隆抗体[EPR17078] to Cytokeratin 7 - BSA and Azide free
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), ICC/IF, WB, IHC-Fr, IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Rat bladder and kidney, Mouse lung, kidney and liver tissue lysates. Hela cell lysate. IHC-P: Human mammary gland, Mouse liver, and Rat liver tissue. IHC-F: Mouse kidney tissue ICC/IF: A549 cells
常规说明	<p>ab220804 is the carrier-free version of <a href="#">ab181598</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</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 <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

## 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR17078
同种型	IgG

## 应用

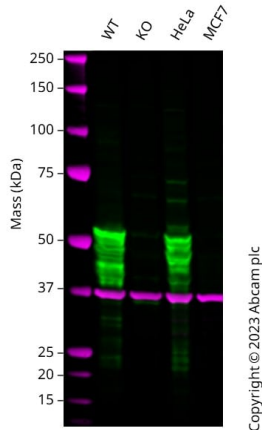
**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab220804于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 51, 45, 42 kDa (predicted molecular weight: 51 kDa).
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## 靶标

功能	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).
组织特异性	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.
序列相似性	Belongs to the intermediate filament family.
翻译后修饰	Arg-20 is dimethylated, probably to asymmetric dimethylarginine.
细胞定位	Cytoplasm.



Western blot - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

**All lanes :** Anti-Cytokeratin 7 antibody [EPR17078] - Cytoskeleton Marker ([ab181598](#)) at 1/1000 dilution

**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.

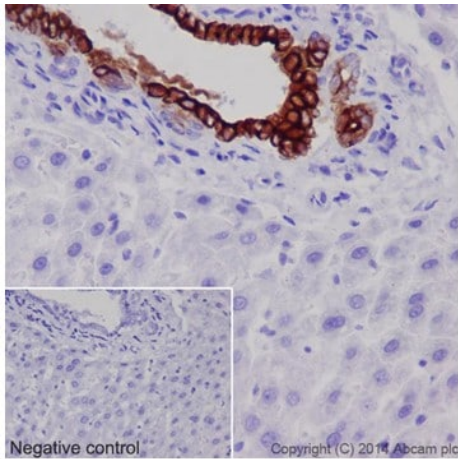
Performed under reducing conditions.

**Predicted band size:** 51 kDa

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab181598](#)).

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 wild-type 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.



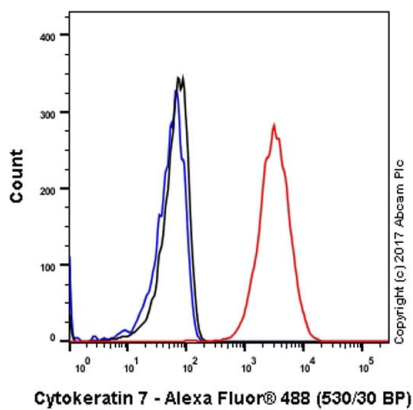
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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) **ab97051** 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).

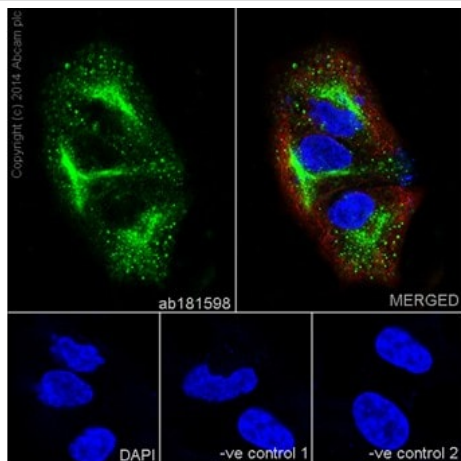
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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 IgG (Alexa Fluor<sup>®</sup> 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (**ab172730**). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).



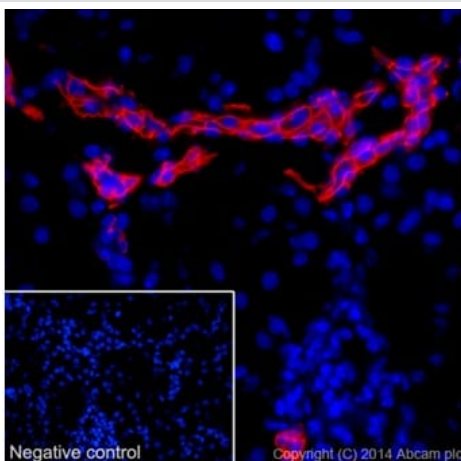
Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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 IgG (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;

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).

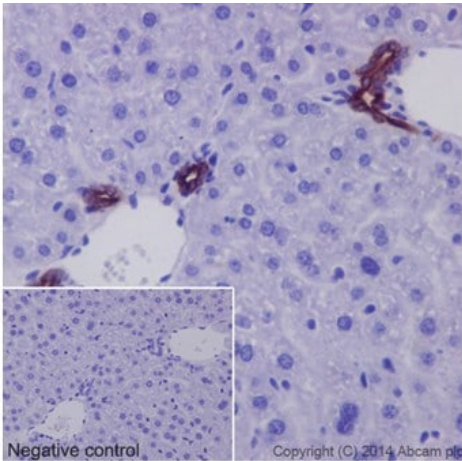


Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).



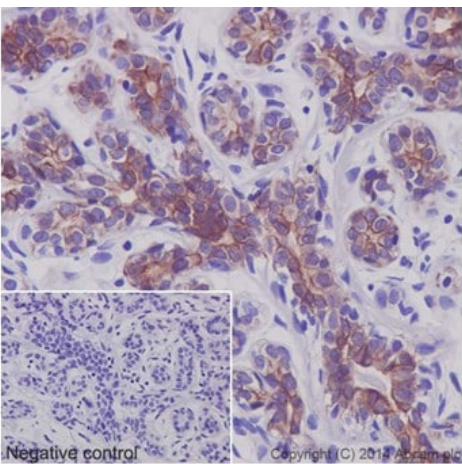
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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) **ab97051** 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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) **ab97051** 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181598**).

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

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
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Anti-Cytokeratin 7 antibody [EPR17078] - BSA and Azide free (ab220804)

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