abcam

Product datasheet

# Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free ab264485

重组

1 References 18 图像

## 概述

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| **产品名称** | Anti-pan Cytokeratin抗体[C-11] - BSA and Azide free |
| **描述** | 小鼠单克隆抗体[C-11] to pan Cytokeratin - BSA and Azide free |
| **宿主** | Mouse |
| **特异性** | Cytokeratin peptides 4,5,6,8,10,13,18. |
| **经测试应用** | **适用于:** Flow Cyt (Intra), IHC-P, IHC-Fr, ICC/IF, mIHC |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Tissue, cells or virus. This information is considered to be commercially sensitive. |
| **阳性对照** | IHC-Fr: Rat kidney, mouse large intestine and human skin. IHC-P: Rat, mouse and human skin. ICC/IF: HeLa and A431 cells. mIHC: Human tonsil tissue and Human breast cancer tissue. Flow cyto (intra): HeLa cells |
| **常规说明** | ab264485 is the carrier-free version of **ab7753**.<br><br>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.<br><br>Our **carrier-free** 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.<br><br>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.<br><br>Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.<br><br>This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. |

## 性能

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|---|---|
| **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<br>Constituent: PBS |
| **无载体** | **是** |
| **纯度** | Protein A purified |
| **纯化说明** | Purified from TCS. Purity >95% by SDS-PAGE. |
| **克隆** | 单克隆 |
| **克隆编号** | C-11 |
| **同种型** | IgG1 |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab264485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。

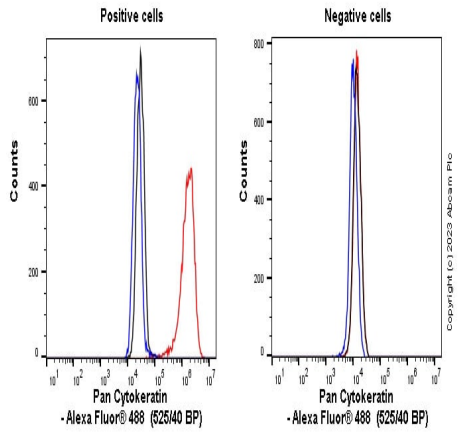
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **Flow Cyt (Intra)** | | Use at an assay dependent concentration. |
| **IHC-P** | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| **IHC-Fr** | | Use at an assay dependent concentration. |
| **ICC/IF** | | Use at an assay dependent concentration. |
| **mIHC** | | Use at an assay dependent concentration. |

## 靶标

**相关性** Cytokeratins, a group comprising at least 29 different proteins, are characteristic of epithelial and trichocytic cells. Cytokeratins 1, 4, 5, 6, and 8 are members of the type II neutral to basic subfamily. Monoclonal anti cytokeratins are specific markers of epithelial cell differentiation and have been widely used as tools in tumor identification and classification. Monoclonal Anti Pan Cytokeratin is a broadly reactive reagent, which recognizes epitopes present in most human epithelial tissues. It facilitates typing of normal, metaplastic and neoplastic cells. Synergy between the various components results in staining amplification. This enables identification of cells, which would otherwise be stained only marginally. The mixture may aid in the discrimination of carcinomas and nonepithelial tumors such as sarcomas, lymphomas and neural tumors. It is also useful in detecting micrometastases in lymph nodes, bone marrow and other tissues and for determining the origin of poorly differentiated tumors. There are two types of cytokeratins the acidic type I cytokeratins and the basic or neutral type II cytokeratins. Cytokeratins are usually found in pairs comprising a type I cytokeratin and a type II cytokeratin. Usually the type II cytokeratins are 8kD larger than their type I counterparts.

**细胞定位** Cytoplasmic

## 图片




Flow Cytometry (Intracellular) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab7753**).

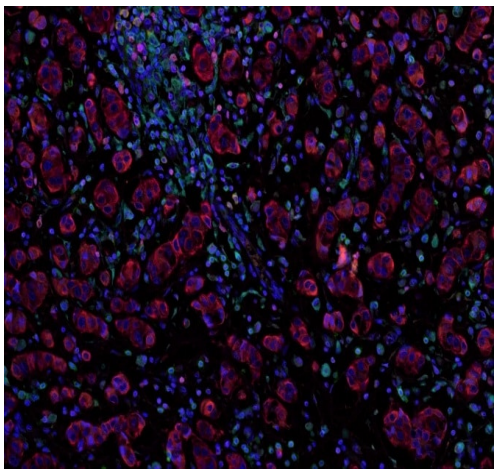
Flow cytometry overlay histogram showing left HeLa positive cells and right negative Jurkat stained with **ab7753** (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (**ab7753**) (1x $10^6$ in 100µl at 0.2µg/ml (1/13150)) for 30min at 22°C.

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

Isotype control antibody (black line) was Mouse IgG1, kappa monoclonal [15-6E10A7] - 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 HeLa Fixed with 4% formaldehyde (10 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Multiplex immunohistochemistry - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image is courtesy of ImmunoAtlas.

Fluorescence multiplex immunohistochemical analysis of Human breast cancer tissue (formalin-fixed paraffin-embedded section).

Merged staining of Anti-PD-L1 (**ab251611**; cyan; Opal™ 520), Anti-Granzyme B (**ab219803**; yellow; Opal™ 540), Anti-PD1 (**ab251613**; magenta; Opal™ 570), Anti-pan Cytokeratin (ab264485; red; Opal™ 620), Anti-EpCAM (**ab225894**; red; Opal™ 620), Anti-CD8 alpha (**ab251596**; green; Opal™ 650) and Anti-FOXP3 (**ab96048**; orange; Opal™ 690). EpCAM and pan-cytokeratin share the same dye and color. Dyes are pseudo-colored for better contrast of the markers.

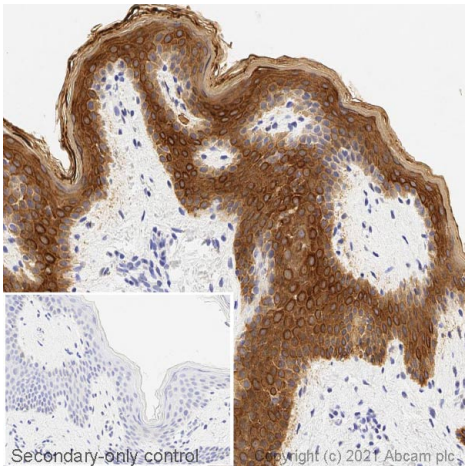
The immunostaining was performed on a Leica Biosystems BOND® MAX instrument with an Opal™ 6-Plex Detection Kit (NEL821001KT, Akoya Biosciences®).

The section was incubated in six rounds of staining; sequentially for **ab251611** (1/750 dilution), **ab219803** (1/250 dilution), **ab251613**

(1/750 dilution), ab264485 (0.5 µg/ml), **ab225894** (1/1250 dilution), **ab251596** (1/1500 dilution) and **ab96048** (10 µg/ml); each using a separate fluorescent tyramide signal amplification system. EDTA based antigen retrieval (Leica Biosystems BOND® Epitope Retrieval Solution 2, pH 9.0, 20 minutes) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity. DAPI (dark blue) was used as a nuclear counter stain.
Microscopy and pseudocoloring of individual Opal™ dyes was performed using a Vectra 3 Imaging System (Akoya Biosciences®).

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**).

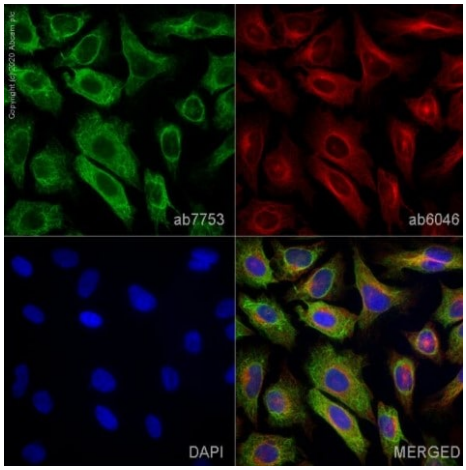
This data is courtesy of ImmunoAtlas and it can be found **here**.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

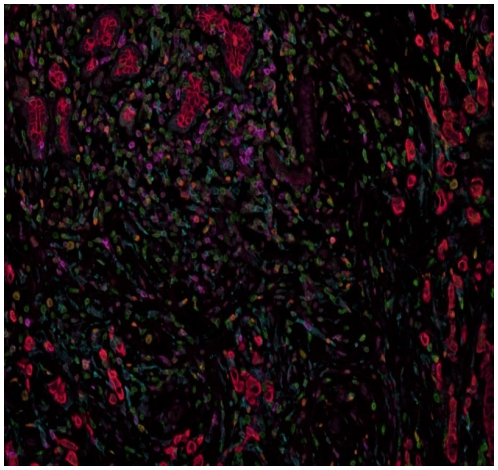
IHC image of pan cytokeratin staining in a section of formalin-fixed paraffin-embedded normal human skin* performed on a Leica BONDTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6,epitope retrieval solution 1) for 20mins. The section was then incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions,primary antibody concentration and antibody incubation times.
*Tissue obtained from the Human Research Tissue Bank,supported by the NIHR Cambridge Biomedical Research Centre




Immunocytochemistry/ Immunofluorescence - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

**ab7753** staining pan Cytokeratin in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min),permeabilized with 0.1% PBS-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 **ab7753** at 1µg/ml and **ab6046**,Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**,Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**,Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS,Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Multiplex immunohistochemistry - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image is courtesy of ImmunoAtlas.

Fluorescence multiplex immunohistochemical analysis of Human breast cancer tissue (formalin-fixed paraffin-embedded section).

Merged staining of Anti-PD-L1 (**ab251611**; cyan; Opal™ 520), Anti-Granzyme B (**ab219803**; yellow; Opal™ 540), Anti-PD1 (**ab251613**; magenta; Opal™ 570), Anti-pan Cytokeratin (ab264485; red; Opal™ 620), Anti-EpCAM (**ab225894**; red; Opal™ 620), Anti-CD8 alpha (**ab251596**; green; Opal™ 650) and Anti-FOXP3 (**ab96048**; orange; Opal™ 690). EpCAM and pan-cytokeratin share the same dye and color. Dyes are pseudo-colored for better contrast of the markers.

The immunostaining was performed on a Leica Biosystems BOND® MAX instrument with an Opal™ 6-Plex Detection Kit (NEL821001KT, Akoya Biosciences®).

The section was incubated in six rounds of staining; sequentially for **ab251611** (1/750 dilution), **ab219803** (1/250 dilution), **ab251613** (1/750 dilution), ab264485 (0.5 µg/ml), **ab225894** (1/1250 dilution), **ab251596** (1/1500 dilution) and **ab96048** (10 µg/ml); each using a separate fluorescent tyramide signal amplification system. EDTA based antigen retrieval (Leica Biosystems BOND® Epitope Retrieval Solution 2, pH 9.0, 20 minutes) was used in between

rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity. DAPI (dark blue) was used as a nuclear counter stain.
Microscopy and pseudocoloring of individual Opal™ dyes was performed using a Vectra 3 Imaging System (Akoya Biosciences®).

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**).

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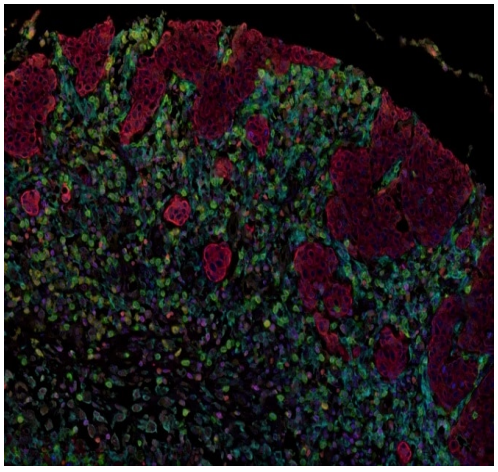

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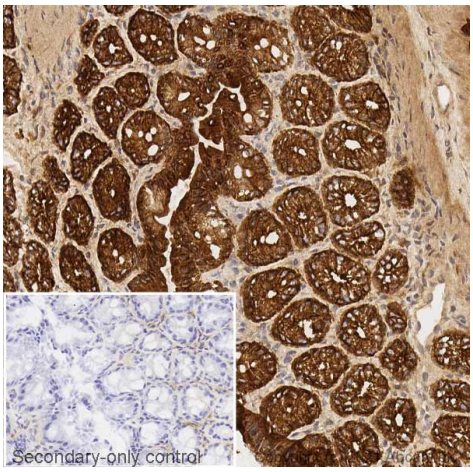
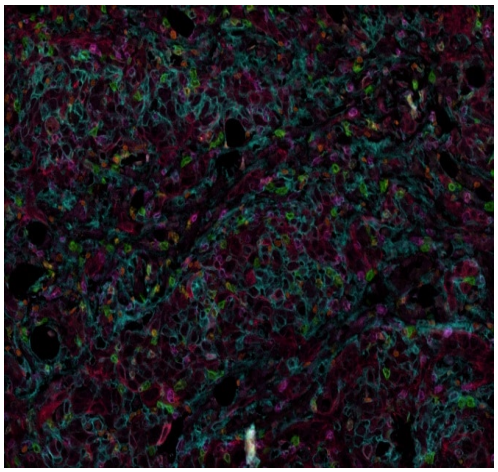



Immunohistochemistry (Frozen sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

IHC image of pan cytokeratin staining in a section of frozen normal mouse large intestine performed on a Leica BONDTM system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature. A goat anti-mouse IgG1 bridging antibody,**ab125913**,was added for 8 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.



Multiplex immunohistochemistry - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image is courtesy of ImmunoAtlas.

Fluorescence multiplex immunohistochemical analysis of Human breast cancer tissue (formalin-fixed paraffin-embedded section).

Merged staining of Anti-PD-L1 (**ab251611**; cyan; Opal™ 520), Anti-Granzyme B (**ab219803**; yellow; Opal™ 540), Anti-PD1 (**ab251613**; magenta; Opal™ 570), Anti-pan Cytokeratin (ab264485; red; Opal™ 620), Anti-EpCAM (**ab225894**; red; Opal™ 620), Anti-CD8 alpha (**ab251596**; green; Opal™ 650) and Anti-FOXP3 (**ab96048**; orange; Opal™ 690). EpCAM and pan-cytokeratin share the same dye and color. Dyes are pseudo-colored for better contrast of the markers.

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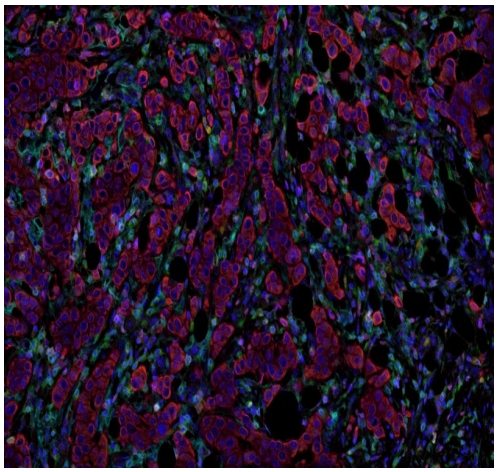

Multiplex immunohistochemistry - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

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Merged staining of Anti-PD-L1 (**ab251611**; cyan; Opal™ 520), Anti-Granzyme B (**ab219803**; yellow; Opal™ 540), Anti-PD1 (**ab251613**; magenta; Opal™ 570), Anti-pan Cytokeratin (ab264485; red; Opal™ 620), Anti-EpCAM (**ab225894**; red; Opal™ 620), Anti-CD8 alpha (**ab251596**; green; Opal™ 650) and Anti-FOXP3 (**ab96048**; orange; Opal™ 690). EpCAM and pan-cytokeratin share the same dye and color. Dyes are pseudo-colored for better contrast of the markers.

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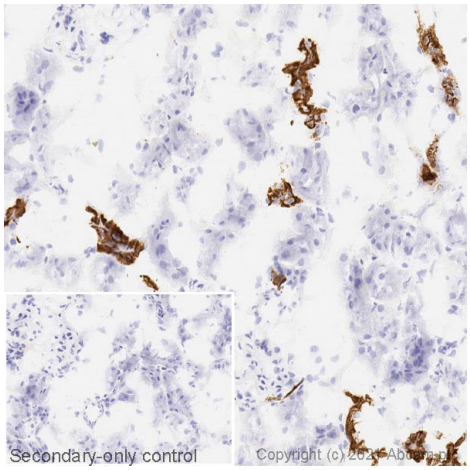
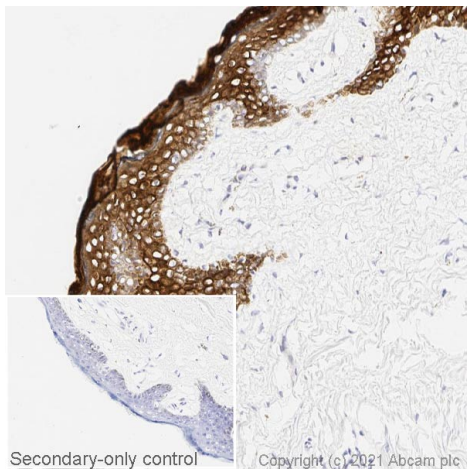



Immunohistochemistry (Frozen sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

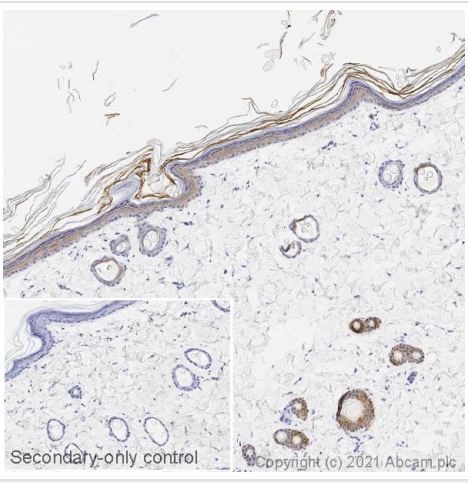
IHC image of pan cytokeratin staining in a section of frozen normal rat kidney performed on a Leica BONDTM system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.




Immunohistochemistry (Frozen sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

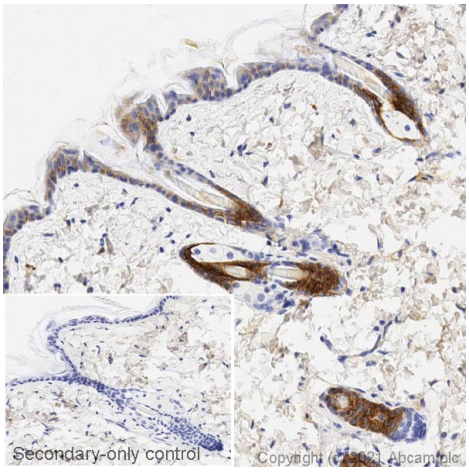
IHC image of pan cytokeratin staining in a section of frozen normal human skin performed on a Leica BONDTM system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions,primary antibody concentration and antibody incubation times.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

IHC image of pan cytokeratin staining in a section of formalin-fixed paraffin-embedded normal rat skin performed on a Leica BONDTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6,epitope retrieval solution 1) for 20mins. The section was then incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions,primary antibody concentration and antibody incubation times.

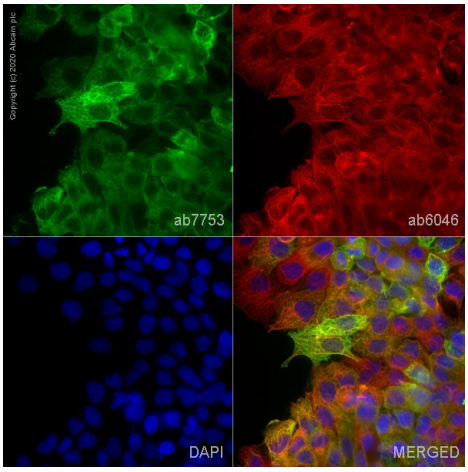



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

IHC image of pan cytokeratin staining in a section of formalin-fixed paraffin-embedded normal mouse skin performed on a Leica BONDTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6,epitope retrieval solution 1) for 20mins. The section was then incubated with **ab7753**, 1µg/ml, for 15 mins at room temperature. A goat anti-mouse IgG1 bridging antibody,**ab125913**,was added for 8 mins at room temperature and detected using an HRP conjµgated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen

retrieval conditions,primary antibody concentration and antibody incubation times.

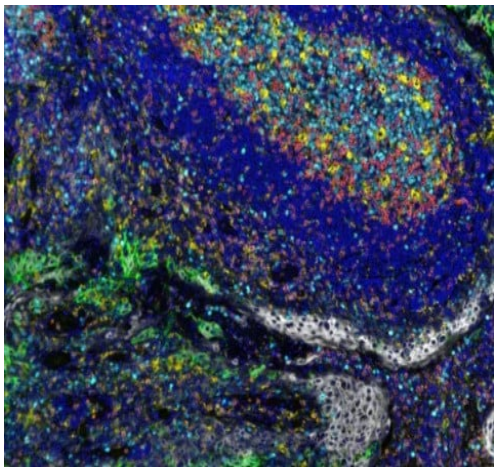



Immunocytochemistry/ Immunofluorescence - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab7753**)

**ab7753** staining pan Cytokeratin in A431 cells. The cells were fixed with 4% paraformaldehyde (10 min),permeabilized with 0.1% PBS-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 **ab7753** at 1µg/ml and **ab6046**,Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**,Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**,Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS,Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Multiplex immunohistochemistry - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image was generated from the hybridoma version of the product.

Fluorescence multiplex immunohistochemical analysis of normal human tonsil tissue (formalin-fixed paraffin-embedded section).

Merged staining of anti-PD1 (**ab237728**; orange; Opal™520), anti-PDL1 (**ab237726**; green; Opal™540), anti-CD68 (**ab192847**; yellow; Opal™570), anti-CD3 (**ab16669**; red; Opal™620), anti-Ki67 (**ab16667**; light blue; Opal™650) and anti-PanCK (**ab7753**; grey; Opal™690).

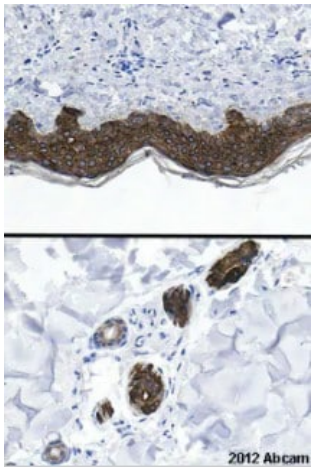
The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 7-color automation IHC kit (NEL821001KT, Akoya Biosciences®).

The section was incubated in six rounds of staining; in the order of **ab237728** (1/500 dilution), **ab237726** (1/500 dilution), **ab192847** (1/300 dilution), **ab16669** (1/300 dilution), **ab16667** (1/200 dilution) and **ab7753** (1/200 dilution); each using a separate fluorescent tyramide signal amplification system.

Sodium citrate antigen retrieval (Leica ER1, pH6.0, 30 minutes) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity.

DAPI (dark blue) was used as a nuclear counter stain.

Microscopy and pseudocoloring of individual Opal™ dyes was performed using a Vectra Polaris.

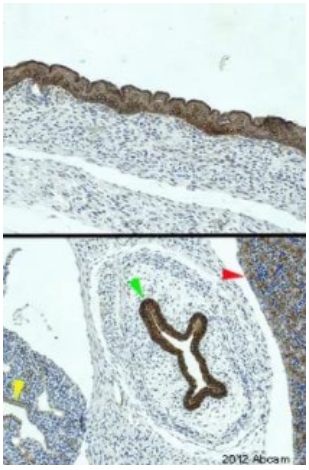



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image is courtesy of an Abreview submitted by Carl Hobbs

This image was generated from the hybridoma version of the product.

**ab7753** staining human skin sections by IHC-P. The tissue was fixed with formaldehyde and a heat mediated antigen retrival step was performed with citric acid pH 6. Blocking of the sample was done with 1% BSA for 10 minutes at 21°C, followed by staining with **ab7753** at 1/250 in TBS/BSA/azide for 2h at 21°C. A biotinylated goat anti-rabbit polyclonal antibody at 1/200 was used as the secondary antibody.

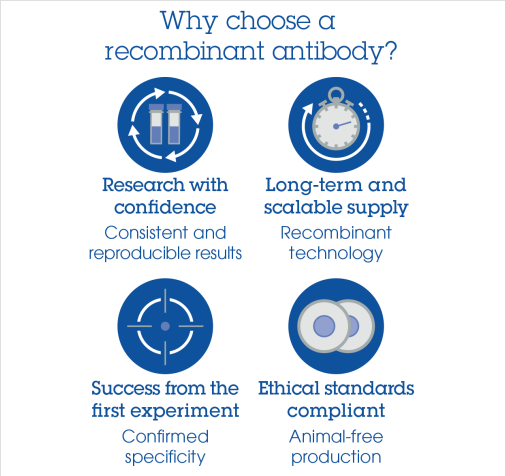



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

This image is courtesy of an Abreview submitted by Carl Hobbs

This image was generated from the hybridoma version of the product.

**ab7753** staining rat embryonic skin/organ sections by IHC-P. The tissue was fixed with formaldehyde and a heat mediated antigen retrival step was performed with citric acid pH 6. Blocking of the sample was done with 1% BSA for 10 minutes at 21°C, followed by staining with **ab77539** at 1/250 in TBS/BSA/azide for 2h at 21°C. A biotinylated goat anti-mouse polyclonal antibody at 1/200 was used as the secondary antibody.




Anti-pan Cytokeratin antibody [C-11] - BSA and Azide free (ab264485)

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