# abcam

### **Product datasheet**

## Anti-Cytokeratin 5 antibody [EPR1600Y] ab75869

重组 RabMAb

★★★★★ 1 Abreviews 24 References 12 图像

| Anti-Cytokeratin 5 <b>抗体</b> [EPR1600Y]  |
|--|
| 兔单克隆抗体[EPR1600Y] to Cytokeratin 5  |
| Rabbit   |
| 适用于: WB, IHC-P, ICC/IF, Flow Cyt (Intra)<br>不适用于: IP   |
| 与反应: Human   |
| Synthetic peptide corresponding to Human Cytokeratin 5.<br>Database link: <u>P13647</u>  |
| A431 cell lysate and human squamous cervical carcinoma tissue. IHC-P: human normal cervix tissue.  |
| <ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <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> <li>For more information see here.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb<sup>®</sup> patents.</li> <li>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</li> </ul> |
|  |

| 性能                    |   |
|-----------------------|---|
| 形式                    | Liquid  |
| 存 <b>放</b> 说明         | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C. |
| 解离常数(K <sub>D</sub> ) | $K_{D} = 3.19 \times 10^{-10} M$  |
|                       | 10-10   |

LOW 10<sup>-6</sup>

HIGH

|               | -1 -0 -3 -10 -11 -12   |  |
|---------------|--|--|
|               | <u>Learn more about K</u> D  |  |
| 存储溶液          | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |  |
| 纯 <b>度</b>    | Protein A purified   |  |
| 克隆            | 单 <b>克隆</b>  |  |
| 克 <b>隆</b> 编号 | EPR1600Y   |  |
| 同种型           | lgG  |  |
|               |  |  |

.7

-8

.9

-10

-11

-12

应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab75869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  |
|------------------|------|---|
| WB               | ★★★★ | 1/10000 - 1/50000. Detects a band of approximately 62 kDa<br>(predicted molecular weight: 62 kDa).    |
| IHC-P            |      | 1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. |
| ICC/IF           |      | 1/100 - 1/500.  |
| Flow Cyt (Intra) |      | Use at an assay dependent concentration.  |

应用说明

Is unsuitable for IP.

#### 靶标

疾病相关

Defects in KRT5 are a cause of epidermolysis bullosa simplex Dowling-Meara type (DM-EBS) [MIM:131760]. DM-EBS is a severe form of intraepidermal epidermolysis bullosa characterized by generalized herpetiform blistering, milia formation, dystrophic nails, and mucous membrane involvement.

Defects in KRT5 are the cause of epidermolysis bullosa simplex with migratory circinate erythema (EBSMCE) [MIM:609352]. EBSMCE is a form of intraepidermal epidermolysis bullosa characterized by unusual migratory circinate erythema. Skin lesions appear from birth primarily on the hands, feet, and legs but spare nails, ocular epithelia and mucosae. Lesions heal with brown pigmentation but no scarring. Electron microscopy findings are distinct from those seen in the DM-EBS, with no evidence of tonofilament clumping.

Defects in KRT5 are a cause of epidermolysis bullosa simplex Weber-Cockayne type (WC-EBS) [MIM:131800]. WC-EBS is a form of intraepidermal epidermolysis bullosa characterized by blistering limited to palmar and plantar areas of the skin.

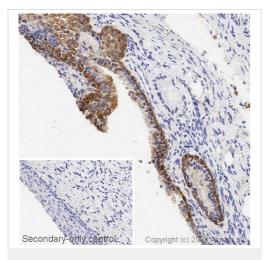
Defects in KRT5 are a cause of epidermolysis bullosa simplex Koebner type (K-EBS) [MIM:131900]. K-EBS is a form of intraepidermal epidermolysis bullosa characterized by generalized skin blistering. The phenotype is not fundamentally distinct from the Dowling-Meara type, althought it is less severe. Defects in KRT5 are the cause of epidermolysis bullosa simplex with mottled pigmentation (MP-EBS) [MIM:131960]. MP-EBS is a form of intraepidermal epidermolysis bullosa characterized by blistering at acral sites and 'mottled' pigmentation of the trunk and proximal extremities with hyperand hypopigmentation macules.

Defects in KRT5 are the cause of Dowling-Degos disease (DDD) [MIM:179850]; also known as Dowling-Degos-Kitamura disease or reticulate acropigmentation of Kitamura. DDD is an autosomal dominant genodermatosis. Affected individuals develop a postpubertal reticulate hyperpigmentation that is progressive and disfiguring, and small hyperkeratotic dark brown papules that affect mainly the flexures and great skin folds. Patients usually show no abnormalities of the hair or nails.

Belongs to the intermediate filament family.

#### 序列相似性

#### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

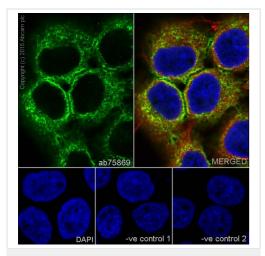
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) IHC image of Cytokeratin 5 staining in a section of formalin-fixed paraffin-embedded normal human cervix\* performed on a Leica Biosystems BOND® RX instrument. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with **ab78569**, 0.1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated 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

Fluorescent immunohistochemical analysis of paraffin-embedded human cervical carcinoma tissue using unpurified ab75869. Green-CK5 red-PI

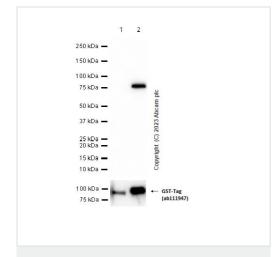
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Immunocytochemistry/Immunofluorescence analysis of A431 (human epidermoid carcinoma) cells labelling Cytokeratin 5 with purified ab75869 at 1/100. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were costained with **ab7291**, a mouse anti-tubulin antibody (1/1000) using **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/1000) as the secondary. Nuclei couterstained 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**) was used followed by anti-rabbit secondary antibody (**ab150077**).



Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

**All lanes :** Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/1000 dilution

Lane 1 : N-GST tagged full-length recombinant human Cytokeratin
6A Protein, 10 ng
Lane 2 : N-GST tagged full-length recombinant human Cytokeratin
5 protein, 10 ng

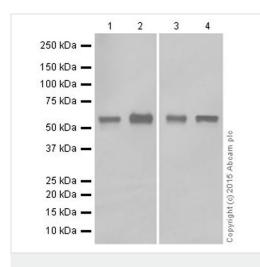
#### Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 62 kDa Observed band size: 87 kDa

Exposure time: 10 seconds

Blocking buffer: 5% NFDM/TBST.



Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

**All lanes :** Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/50000 dilution (purified)

 $\label{eq:Lane 1: A431 (human epidermoid carcinoma) whole cell lysate} \label{eq:Lane 1: A431}$ 

- Lane 2 : HACAT (human keratinocyte) whole cell lysate
- Lane 3 : Human skin tissue lysate
- Lane 4 : Human fetal tonsil tissue lysate

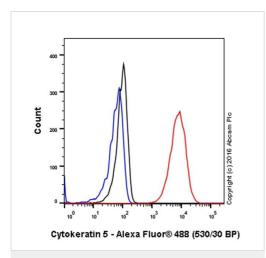
Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

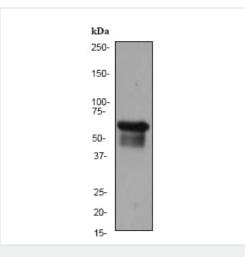
Predicted band size: 62 kDa Observed band size: 62 kDa

Blocking and diluting buffer 5% NFDM/TBST



Flow Cytometry (Intracellular) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Cytokeratin 5 with purified ab75869 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

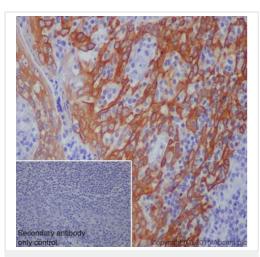


Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/10000 dilution (unpurified) + A431 cell lysate at 10 µg

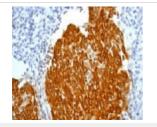
#### Secondary

goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 62 kDa Observed band size: 62 kDa

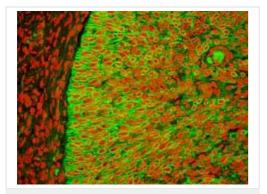


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) Immunohistochemical analysis of paraffin embedded human tonsil tissue section labelling Cytokeratin 5 with purified ab75869 at dilution of 1/1000. The secondary antibody used was HRP-conjugated Goat Anti-Rabbit IgG H&L (<u>ab97051</u>) at dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) Unpurified ab75869 at 1/100 dilution staining Cytokeratin 5 in human squamous cervical carcinoma by Immunohistochemistry, Paraffin-embedded tissue.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

OI-RD Scanning - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) Fluorescent immunohistochemical analysis of paraffin-embedded human cervical carcinoma using unpurified ab75869. Green-CK5 red-Pl.

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

Equilibrium disassociation constant (K\_D)  $\label{eq:kappa}$  Learn more about K\_D

#### Click here to learn more about KD



Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <u>https://www.abcam.cn/abpromise</u> or contact our technical team.

#### **Terms and conditions**

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors