# abcam

# Product datasheet

# Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker ab52635

重组 RabMAb

★★★★★ 10 Abreviews 139 References 21 图像

概述

产品名称 Anti-Cytokeratin 5抗体[EP1601Y] - Cytoskeleton Marker

描述 兔单克隆抗体[EP1601Y] to Cytokeratin 5 - Cytoskeleton Marker

宿主 Rabbit

特异性 Mouse reactivity is based on IHC (positive tissues: Liver, lung, brain and skin). However, WB was

negative for Mouse brain, heart, kidney and spleen. There is background staining in mouse and

rat islet.

经测试应用 适用于: Flow Cyt (Intra), ICC/IF, WB, IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: A431 cell, human fetal skin, rat skin and mouse skin lysates. IHC-P: Squamous cell cervical,

> squamous cell lung and basal cell breast carcinoma tissue. Human transitional urinary bladder carcinoma tissue. Normal tonsil squamous, human cervical carcinoma, mouse skin and rat skin

tissues. Human normal skin tissue. Flow Cyt (intra) and ICC/IF: A431 cells. ICC/IF: A431 cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our  $\mathsf{RabMAb}^{\texttt{®}}$  technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

性能

形式

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EP1601Y

**同种型** IgG

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab52635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)		1/20.
ICC/IF		1/100.
WB	**** <u>(2)</u>	1/10000. Detects a band of approximately 62 kDa (predicted molecular weight: 62 kDa).
IHC-P	<b>★★★★★ (4)</b>	1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

#### 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.

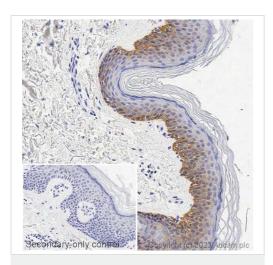
Defects in KRT5 are a cause of epidermolysis bullosa simplex Weber-Cockayne type (WC-EBS) [MIM:131800]. WC-EBS is a form of intraepidermal epidermolysis bullosa characterized by blistering limited to palmar and plantar areas of the skin.

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

#### 图片



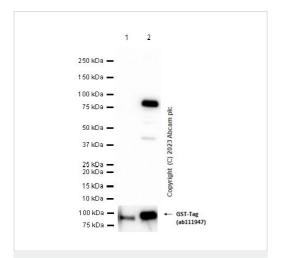
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody

[EP1601Y] - Cytoskeleton Marker (ab52635)

IHC image of Cytokeratin 5 staining in a section of formalin-fixed paraffin-embedded normal human skin\* 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 ab52635, 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



Western blot - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

**All lanes :** Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635) at 1/1000 dilution

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

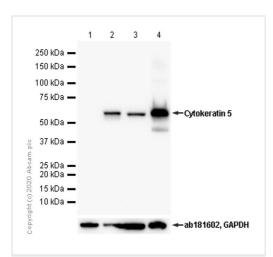
**Lane 2 :** N-GST tagged full-length recombinant human Cytokeratin 5 protein,10ng

#### 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



Western blot - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

Blocking buffer: 5% NFDM /TBST.

**All lanes :** Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635) at 1/1000 dilution

Lane 1: Human skin lysates prepared in RIPA lysis method

Lane 2: Human skin lysates prepared in 1%SDS Hot lysis method

Lane 3: Mouse skin lysates prepared in RIPA lysis method

Lane 4: Mouse skin lysates prepared in 1%SDS Hot lysis method

Lysates/proteins at 20 µg per lane.

### **Secondary**

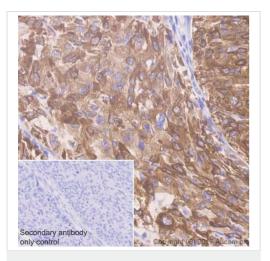
**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 62 kDa

The lysates were prepared in 1%SDS Hot lysis method.

Observed MW: 62kDa

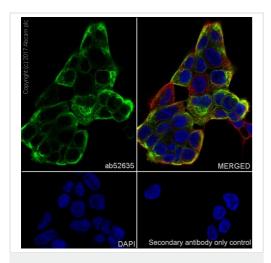
Blocking/diluting buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody

[EP1601Y] - Cytoskeleton Marker (ab52635)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervical carcinoma tissue sections labeling Cytokeratin 5 with Purified ab52635 at 1:200 dilution. Heat mediated antigen retrieval was performed using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

Immunocytochemistry/ Immunofluorescence analysis of A431 (Human epidermoid carcinoma epithelial cell) cells labeling Cytokeratin 6 with Purified ab52635 at 1/100 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). <a href="mailto:ab150077">ab150077</a> Goat anti rabbit lgG(Alexa Fluor® 488) was used as the secondary antibody at 1/1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

**All lanes :** Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635) at 1/10000 dilution (purified)

Lane 1: Human fetal skin lysates

Lane 2: Rat skin lysates

Lane 3: Mouse skin lysates

Lysates/proteins at 20 µg per lane.

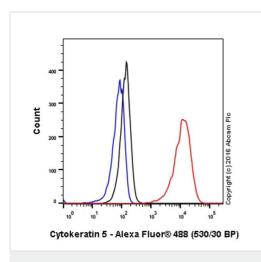
#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

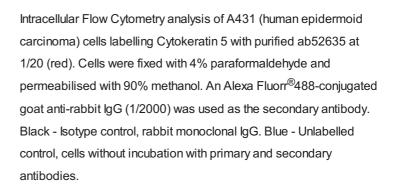
Predicted band size: 62 kDa Observed band size: 62 kDa

Blocking and diluting buffer: 5% NFDM/TBST.

The lysates were prepared in 1%SDS Hot lysis method.

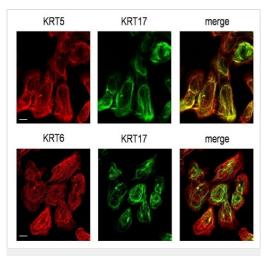


Flow Cytometry (Intracellular) - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)





Western blot - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635) Different batches of ab52635 were tested on Rat skin lysate at 1.0  $\mu$ g/ml. 15  $\mu$ g of lysate was loaded in each lane. Bands observed at 62 kDa.



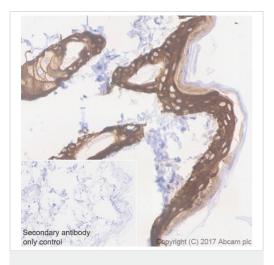
# Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

Khanom, R. et al PLoS One. 2016 Aug 11;11(8):e0161163. doi: 10.1371/journal.pone.0161163. eCollection 2016 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

#### Colocalization of KRT5, KRT6 and KRT17 in HSC3 cells

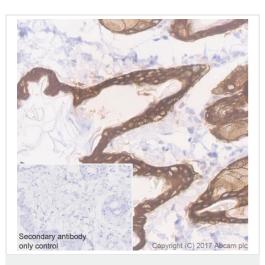
Immunocytochemistry in HSC3 (human oral squamous carcinoma cell line) cells. Scale bar, 10  $\mu$ m.

(Taken from Figure S3 of Khanom et al)



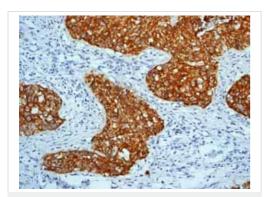
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat skin tissue sections labeling Cytokeratin 5 with Purified ab52635 at 1:200 dilution. Heat mediated antigen retrieval was performed using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

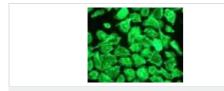
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse skin tissue sections labeling Cytokeratin 5 with Purified ab52635 at 1:200 dilution. Heat mediated antigen retrieval was performed using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



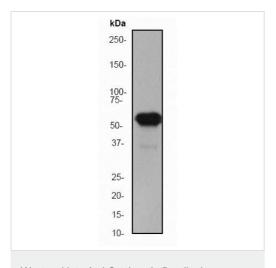
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

Unpurified ab52635 showing positive staining in squamous cell cervical carcinoma tissue.

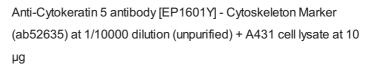




Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)



Western blot - Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)



## **Secondary**

Goat anti-rabbit HRP at 1/2000 dilution

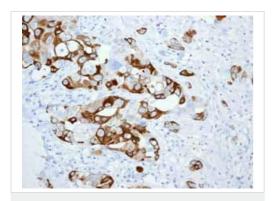
**Predicted band size:** 62 kDa **Observed band size:** 62 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody

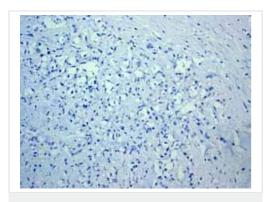
[EP1601Y] - Cytoskeleton Marker (ab52635)

Human transitional urinary bladder carcinoma stained with unpurified ab52635 at 1/100 - 1/250 dilution.



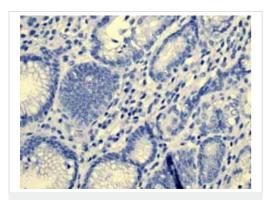
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

Unpurified ab52635 showing positive staining in basal cell breast carcinoma tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

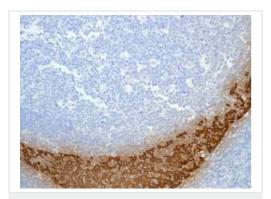
Unpurified ab52635 showing negative staining in ductal breast carcinoma tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody

[EP1601Y] - Cytoskeleton Marker (ab52635)

Unpurified ab52635 showing negative staining in stomach adenocarcinoma tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

Unpurified ab52635 showing positive staining in normal tonsil squamous cells tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 5 antibody
[EP1601Y] - Cytoskeleton Marker (ab52635)

Unpurified ab52635 showing positive staining in squamous cell lung carcinoma tissue.



Anti-Cytokeratin 5 antibody [EP1601Y] -Cytoskeleton Marker (ab52635)

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