

# Anti-Cytokeratin 14 antibody [RCK107] ab9220

★★★★☆ [2 Abreviews](#) [32 References](#) [5 图像](#)

### 概述

<b>产品名称</b>	Anti-Cytokeratin 14抗体[RCK107]
<b>描述</b>	小鼠单克隆抗体[RCK107] to Cytokeratin 14
<b>宿主</b>	Mouse
<b>特异性</b>	This antibody reacts exclusively with cytokeratin 14 which is present in basal cell compartments of stratified and combined epithelia.
<b>经测试应用</b>	<b>适用于:</b> IHC-Fr, WB, ICC/IF
<b>种属反应性</b>	<b>与反应:</b> Dog, Human, Pig
<b>免疫原</b>	Tissue, cells or virus corresponding to Human Cytokeratin 14. Cytoskeletal preparation of TR146 epithelial cells.
<b>阳性对照</b>	cytoskeletal preparation of TR146 epithelial cells, skin tissue lysate (Human)
<b>常规说明</b>	

Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a remarkable biochemical diversity, represented in human epithelial tissues by at least 20 different polypeptides. They range in molecular weight between 40 kDa and 68 kDa and isoelectric pH between 4.9 – 7.8. The individual human cytokeratins are designated 1 to 20. The various epithelia in the human body usually express cytokeratins which are not only characteristic of the type of epithelium, but also related to the degree of maturation or differentiation within an epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. The cytokeratin antibodies are not only of assistance in the differential diagnosis of tumors using immunohistochemistry on tissue sections, but are also a useful tool in cytopathology assay.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

### 性能

<b>形式</b>	Liquid
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<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>存储溶液</b>	Preservative: 0.09% Sodium azide Constituent: PBS
<b>纯度</b>	Protein A purified
<b>Primary antibody说明</b>	Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a remarkable biochemical diversity, represented in human epithelial tissues by at least 20 different polypeptides. They range in molecular weight between 40 kDa and 68 kDa and isoelectric pH between 4.9 – 7.8. The individual human cytokeratins are designated 1 to 20. The various epithelia in the human body usually express cytokeratins which are not only characteristic of the type of epithelium, but also related to the degree of maturation or differentiation within an epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. The cytokeratin antibodies are not only of assistance in the differential diagnosis of tumors using immunohistochemistry on tissue sections, but are also a useful tool in cytopathology and flow cytometric assays.
<b>克隆</b>	单克隆
<b>克隆编号</b>	RCK107
<b>骨髓瘤</b>	Sp2/0-Ag14
<b>同种型</b>	IgG1

## 应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab9220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
IHC-Fr	★★★★☆ (2)	1/100 - 1/200.
WB		1/100 - 1/1000.
ICC/IF		Use a concentration of 1 µg/ml.

## 靶标

<b>功能</b>	The nonhelical tail domain is involved in promoting KRT5-KRT14 filaments to self-organize into large bundles and enhances the mechanical properties involved in resilience of keratin intermediate filaments in vitro.
<b>组织特异性</b>	Detected in the basal layer, lowered within the more apically located layers specifically in the stratum spinosum, stratum granulosum but is not detected in stratum corneum. Strongly expressed in the outer root sheath of anagen follicles but not in the germinative matrix, inner root sheath or hair. Found in keratinocytes surrounding the club hair during telogen.
<b>疾病相关</b>	Defects in KRT14 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 KRT14 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 KRT14 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, although it is less severe.

Defects in KRT14 are the cause of epidermolysis bullosa simplex autosomal recessive (AREBS) [MIM:601001]. AREBS is an intraepidermal epidermolysis bullosa characterized by localized blistering on the dorsal, lateral and plantar surfaces of the feet.

Defects in KRT14 are the cause of Naegeli-Franceschetti-Jadassohn syndrome (NFJS) [MIM:161000]; also known as Naegeli syndrome. NFJS is a rare autosomal dominant form of ectodermal dysplasia. The cardinal features are absence of dermatoglyphics (fingerprints), reticular cutaneous hyperpigmentation (starting at about the age of 2 years without a preceding inflammatory stage), palmoplantar keratoderma, hypohidrosis with diminished sweat gland function and discomfort provoked by heat, nail dystrophy, and tooth enamel defects.

Defects in KRT14 are the cause of dermatopathia pigmentosa reticularis (DPR) [MIM:125595]. DPR is a rare ectodermal dysplasia characterized by lifelong persistent reticulate hyperpigmentation, noncicatricial alopecia, and nail dystrophy.

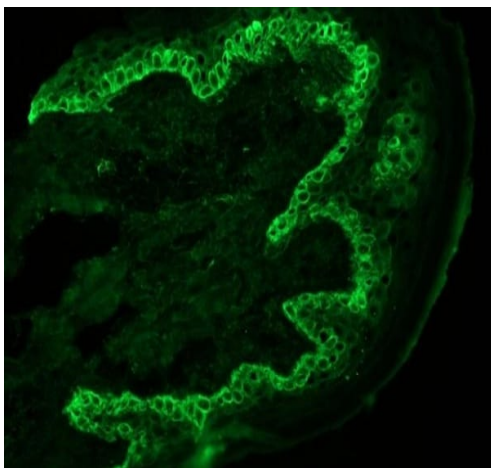
#### 序列相似性

Belongs to the intermediate filament family.

#### 细胞定位

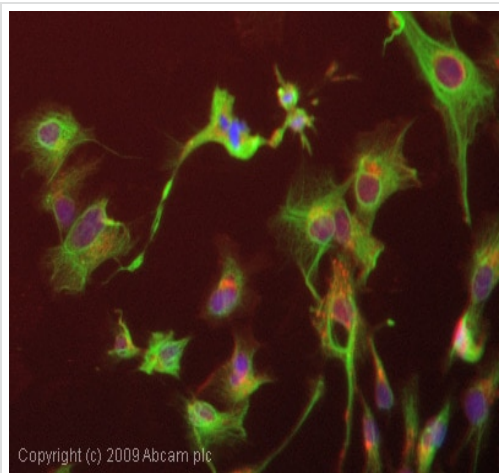
Cytoplasm. Nucleus. Expressed in both as a filamentous pattern.

#### 图片



Immunohistochemical analysis of swine skin tissue labeling Cytokeratin 14 with ab9220. Showing staining of basal cells.

Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 14 antibody [RCK107] (ab9220)



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Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 14 antibody [RCK107] (ab9220)

ICC/IF image of ab9220 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab9220, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-Cytokeratin 14 antibody [RCK107] (ab9220)

Anti-Cytokeratin 14 antibody [RCK107] (ab9220) at 4 µg/ml + Human skin tissue lysate - total protein (**ab30166**) at 20 µg

#### Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

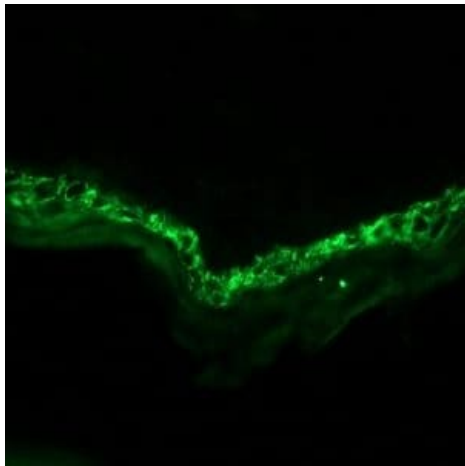
Developed using the ECL technique.

Performed under reducing conditions.

**Observed band size:** 58 kDa

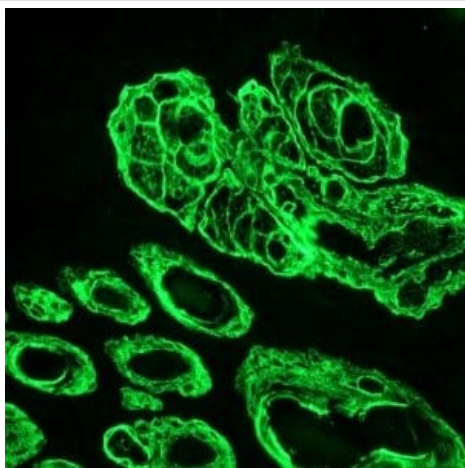
**Additional bands at:** 72 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 minutes



Immunohistochemical analysis of dog skin epidermis tissue labelling Cytokeratin 14 using ab9220. Staining of basal keratinocyte layer is observed.

Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 14 antibody [RCK107] (ab9220)



Immunohistochemical analysis of dog skin appendages labelling Cytokeratin 14 with ab9220.

Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 14 antibody [RCK107] (ab9220)

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