# abcam

## Product datasheet

## Anti-Involucrin antibody [SY5] ab68

★★★★★ 9 Abreviews 46 References 5 图像

### 概述

产品名称 Anti-Involucrin抗体[SY5]

描述 小鼠单克隆抗体[SY5] to Involucrin

宿主 Mouse

经测试应用 适用于: ICC/IF, IHC-P, Flow Cyt

种属反应性 与反应: Human

不与反应: Mouse

免疫原 Tissue, cells or virus corresponding to Human Involucrin. Purified involucrin from human

keratinocytes.

表位 The epitope maps between codon 421-568 of human involucrin.

阳性对照 IHC-P: Human tonsil, skin tissue. Localized to upper spinous and granular layers in normal skin.

Flow cyt: A431 cells. ICC/IF: MCF7 cells.

常规说明 Involucrin is the differentiation marker of human keratinocytes.

ab81216 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Staining of formalin-fixed tissues is enhanced by digestion with trypsin or Protease XXV at 1 mg/ml PBS for 5 min at  $37 \,^{\circ}\text{C}$  (Note than enzyme digestion is better than citrate buffer based

epitope unmasking)

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

形式 Liquid

**存放说明** 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.

存储溶液 Preservative: 0.02% Sodium azide

Constituent: 99.98% PBS

1

纯**度** Immunogen affinity purified

**克隆** 单克隆

**克隆编号** SY5

**骨髓瘤** P3x63

**同种型** lgG1

轻链类型 unknown

### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab68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
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P	<b>★★★</b> ★★ (2)	Use a concentration of 0.1 - 0.2 μg/ml.
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

## 靶标

功能 Part of the insoluble cornified cell envelope (CE) of stratified squamous epithelia.

组织**特异性** Keratinocytes of epidermis and other stratified squamous epithelia.

序列相似性 Belongs to the involucrin family.

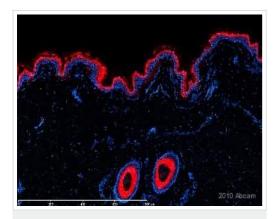
翻译后修饰 Substrate of transglutaminase. Some glutamines and lysines are cross-linked to other involucrin

molecules, to other proteins such as keratin, desmoplakin, periplakin and envoplakin, and to lipids

like omega-hydroxyceramide.

细胞定位 Cytoplasm. Constituent of the scaffolding of the cornified envelope.

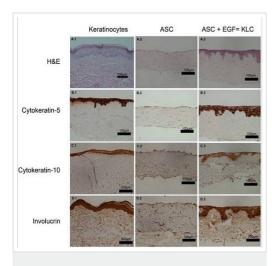
## 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Involucrin antibody [SY5] (ab68)

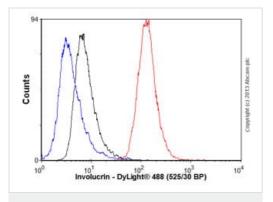
This image is courtesy of an anonymous abreview.

ab68 at a 1/1000 dilution staining Involucrin in human normal skin tissue by Immunohistochemistry (formalin fixed, paraffin embedded sections), incubated for 2 hours at 21°C. Heat mediated antigen retrieval step performed using citrate buffer pH 6.0. Blocked with 10% serum for 30 minutes at 21°C. Secondary used at 1/100 polyclonal Donkey anti-mouse IgG conjugated to Alexa Fluor 594 (red).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Involucrin antibody [SY5] (ab68)

Chavez-Munoz, C. et al PLoS One. 2013 Dec 2;8(12):e80587. doi: 10.1371/journal.pone.0080587. eCollection 2013 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/



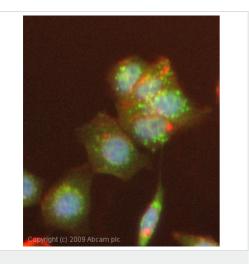
Flow Cytometry - Anti-Involucrin antibody [SY5] (ab68)

## KLC (keratinocyte-like cells) have the capacity to stratify

Human skin was decellularized and confirmed complete cell removal by H&E staining. ASC (human adipose-derived stem cells) were seeded on the epithelial side of human dermal decellularized matrices in the presence or absence of EGF (0.005 μg/mL). Human dermal decellularized matrices seeded with keratinocytes were used as controls. All three groups were kept in the same media conditions and lifted to an air-liquid interphase at the same time. Histological analysis revealed the presence of several layers of KLC with an organization similar to that of keratinocytes (A.1 and 3). Surprisingly, ASC without EGF not only did not transdifferentiate into KLC, but instead migrated inside the matrix (A.2). Immunohistochemical analysis revealed a positive staining of cytokeratin-5 (B.3), cytokeratin-10 (C.3) and Involucrin (D.3) in stratified KLC matrices comparable to that of the stratified keratinocyte matrix (A, B, C and D.1). No positive staining was found in the ASC seeded matrices (A, B, C and D.2).

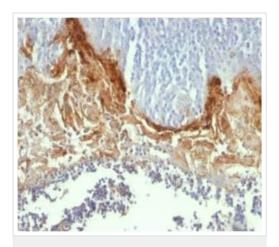
Overlay histogram showing A431 cells stained with ab68 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab68,  $1\mu g/1x10^6$  cells) for 30 min at 22°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-mouse lgG (H&L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353,  $2\mu g/1x10^6$  cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000

events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in A431 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-Involucrin antibody [SY5] (ab68)

ICC/IF image of ab68 stained MCF7 cells. The cells were 4% formaldehyde 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 (ab68, 1μg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor<sup>®</sup> 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor<sup>®</sup> 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Involucrin antibody [SY5] (ab68)

Immunohistochemical analysis of Formalin fixed paraffin embedded human tonsil section labelling Involucrin with ab68 at dilution of 0.1 ug/mL.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## 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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

## Terms and conditions

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