abcam

Product datasheet

Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker ab9023



★★★★ 10 Abreviews 34 References 8 图像

概述

产品名称 Anti-Cytokeratin 8抗体[M20] - Cytoskeleton Marker

描述 小鼠单克隆抗体[M20] to Cytokeratin 8 - Cytoskeleton Marker

宿主 Mouse

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

种属反应性 与反应: Rat, Rabbit, Human

免疫原 Full length native protein (purified) corresponding to Human Cytokeratin 8. Keratin isolated from

the human breast carcinoma cell line MCF-7.

阳性对照 WB: HeLa, A431, PC3 and LNCaP cell lysates. ICC/IF: MCF-7, pancreatic cancer and epithelial

ovarian cancer cells. IHC-Fr: Human colon tissue.

常规说明 Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a

remarkable biochemical diversity, represented in 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 cytokeratin polypeptides are numbered 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.

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

1

存放说明 Shipped at 4°C. Store at +4°C.

存储溶液 pH: 7.3

Preservative: 0.1% Sodium azide
Constituents: PBS, 1% Fetal calf serum

纯**度** Tissue culture supernatant

Primary antibody说明 Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a

remarkable biochemical diversity, represented in 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 cytokeratin polypeptides are numbered 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.

 克隆
 单克隆

 克隆编号
 M20

 同种型
 lgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab9023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		Use 2µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC	****(1)	Use at an assay dependent concentration.
ICC/IF	★★★★ <u>(4)</u>	Use at an assay dependent concentration.
IHC-P	★★★★ <u>(1)</u>	1/5 - 1/25.
IHC-Fr		1/100 - 1/200. For human colon 20min ice cold acetone fixation was carried out with 60min incubation with ab9023 at 37C.
WB	★★★★ <u>(4)</u>	1/100 - 1/1000.

靶标

功能 Together with KRT19, helps to link the contractile apparatus to dystrophin at the costameres of

striated muscle.

组织特异性 Observed in muscle fibers accumulating in the costameres of myoplasm at the sarcolemma

membrane in structures that contain dystrophin and spectrin. Expressed in gingival mucosa and

hard palate of the oral cavity.

疾病相关 Cirrhosis

序列相似性 Belongs to the intermediate filament family.

翻译后修饰 Phosphorylation on serine residues is enhanced during EGF stimulation and mitosis. Ser-74

phosphorylation plays an important role in keratin filament reorganization.

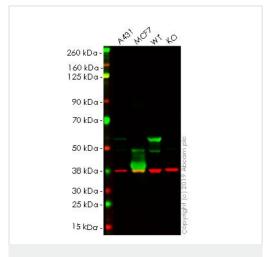
O-glycosylated. O-GlcNAcylation at multiple sites increases solubility, and decreases stability by

inducing proteasomal degradation.

O-glycosylated (O-GlcNAcylated), in a cell cycle-dependent manner.

细胞定位 Cytoplasm. Nucleus, nucleoplasm. Nucleus matrix.

图片



Western blot - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)

All lanes : Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023) at 1/1000 dilution

Lane 1 : A431 cell lysate

Lane 2 : MCF7 cell lysate

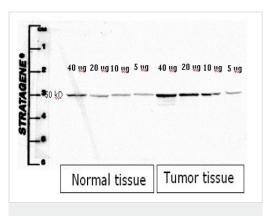
Lane 3: Wild-type HeLa cell lysate

Lane 4: KRT8 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Lanes 1 - 4: Merged signal (red and green). Green - ab9023 observed at 55 kDa. Red - loading control, **ab181602** observed at 37 kDa.

ab9023 was shown to react with Cytokeratin 8 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab255400 (knockout cell lysate ab263785) was used. Wild-type and Cytokeratin 8 knockout samples were subjected to SDS-PAGE. ab9023 and Anti-GAPDH antibody EPR16891] - Loading Control (ab181602) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (ab216772) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



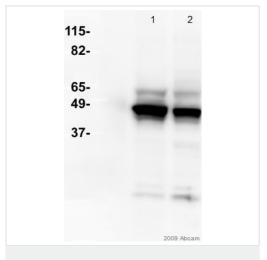
Western blot - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)

The image shows different concentration of total protein from normal and tumour colon tissues.

This picture was kindly supplied as part of the review submitted by Semona Rupchand.

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Western blot - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)

This image is a courtesy of Anonymous Abreview

All lanes : Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023) at 1/2000 dilution

Lane 1 : Lysate prepared from human prostate cancer LNCaP cells

Lane 2: Lysate prepared from human prostate cancer PC3 cells

Lysates/proteins at 50 µg per lane.

Secondary

All lanes : HRP-conjugated goat polyclonal to mouse IgG at 1/10000 dilution

Developed using the ECL technique.

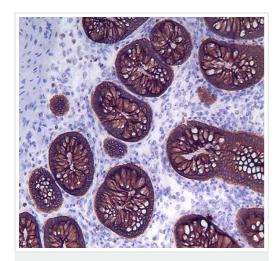
Performed under reducing conditions.

Observed band size: 50 kDa

Additional bands at: 26 kDa, 65 kDa. We are unsure as to the

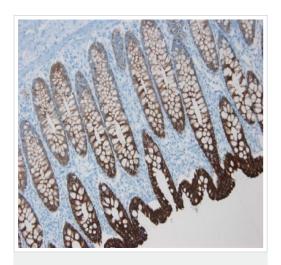
identity of these extra bands.

Exposure time: 4 minutes



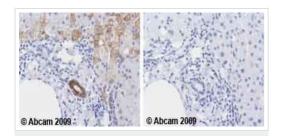
Immunohistochemistry analysis of frozen section of human colon labeling Cytokeratin 8 with ab9023.

Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)

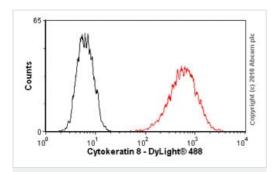


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[M20] - Cytoskeleton Marker (ab9023)

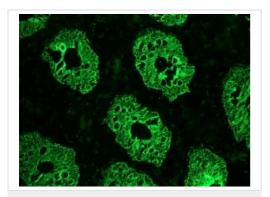
Immunohistochemistry on paraffin section of human colon



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 8 antibody
[M20] - Cytoskeleton Marker (ab9023)



Flow Cytometry - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)



Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 8 antibody [M20] - Cytoskeleton Marker (ab9023)

Ab9023 staining human normal liver parenchima tissue. Staining is localized to cell membrane.

Left panel: with primary antibody at 4 ug/ml. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

Overlay histogram showing MCF-7 cells stained with ab9023 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.5% 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 (ab9023, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H&L) (ab96879) at 1/250 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in MCF-7 cells fixed with methanol (5 min)/permeabilized in 0.5% PBS-Tween used under the same conditions.

Immunohistochemistry on frozen section of human colon

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