abcam

Product datasheet

FITC Anti-Cytokeratin 18 antibody [C-04] ab52459

12 References 3 Images

Overview

Product name FITC Anti-Cytokeratin 18 antibody [C-04]

Description FITC Mouse monoclonal [C-04] to Cytokeratin 18

Host species Mouse

Conjugation FITC. Ex: 493nm, Em: 528nm

Tested applications Suitable for: ICC, Flow Cyt (Intra)

Species reactivity Reacts with: Human

Predicted to work with: Mammals 4

Immunogen Tissue, cells or virus corresponding to Human Cytokeratin 18. Cytoskeleton preparation of

epidermal carcinoma cell line A431

Database link: P05783

Positive control ICC: HCT116 cells; Flow Cyt (Intra): HeLa cells.

General notes

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.4

Preservative: 0.097% Sodium azide Constituents: 0.2% BSA, PBS

Purity Protein A purified

Purification notes Prior to conjugation, the antibody was purified by Protein A affinity chromatography. The purified

antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The

reagent is free of unconjugated FITC. Purity >95% by SDS-PAGE.

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Clonality Monoclonal

Clone number C-04 lsotype lgG1

Applications

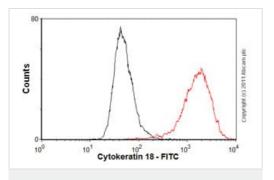
The Abpromise guarantee Our Abpromise guarantee covers the use of ab52459 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use a concentration of 5 μg/ml.
Flow Cyt (Intra)		Use a concentration of 1 - 2 μ g/ml. <u>ab91356</u> - Mouse monoclonal \lg G1, is suitable for use as an isotype control with this antibody.

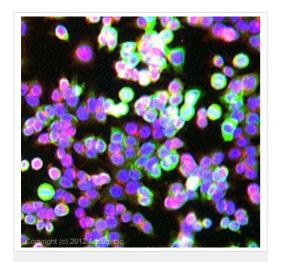
Target		
Function	Involved in the uptake of thrombin-antithrombin complexes by hepatic cells (By similarity). When phosphorylated, plays a role in filament reorganization. Involved in the delivery of mutated CFTR to the plasma membrane. Together with KRT8, is involved in interleukin-6 (IL-6)-mediated barrier protection.	
Tissue specificity	Expressed in colon, placenta, liver and very weakly in exocervix. Increased expression observed in lymph nodes of breast carcinoma.	
Involvement in disease	Defects in KRT18 are a cause of cirrhosis (CIRRH) [MIM:215600].	
Sequence similarities	Belongs to the intermediate filament family.	
Post-translational modifications	Phosphorylation at Ser-34 increases during mitosis. Hyperphosphorylated at Ser-53 in diseased cirrhosis liver. Phosphorylation increases by IL-6. Proteolytically cleaved by caspases during epithelial cell apoptosis. Cleavage occurs at Asp-238 by either caspase-3, caspase-6 or caspase-7. O-glycosylated at multiple sites; glycans consist of single N-acetylglucosamine residues.	
Cellular localization	Cytoplasm > perinuclear region.	

Images



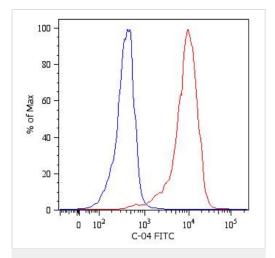
Flow Cytometry (Intracellular) - FITC Anti-Cytokeratin 18 antibody [C-04] (ab52459)

Overlay histogram showing intracellular staining of HeLa cells labeled with ab52459 (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 (ab52459, 1 μ g/1x10⁶ cells) for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 (FITC) (2 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunocytochemistry - FITC Anti-Cytokeratin 18 antibody [C-04] (ab52459)

ICC/IF image of ab52459 stained HCT116 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 (ab52459, 5 μ g/ml) overnight at +4°C. 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 1.43 μ M.



Flow Cytometry (Intracellular) - FITC Anti-Cytokeratin 18 antibody [C-04] (ab52459)

Flow cytometry (Intracellular) analysis HeLa (human cervix carcinoma cell line) cells labeling Cytokeratin 18 with ab52459 (red). Overlay with Isotype mouse IgG1 control FITC antibody (blue).

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