abcam

ab52460

# PE Anti-pan Cytokeratin antibody [C-11]

Anti-pan Cytokeratin antibody [C-11] conjugated to PE - suitable for intracellular flow cytometry, and reacts with human samples. Clone [C-11] is a mouse monoclonal antibody cited in 48 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Conjugation** | PE |
| **Excitation/Emission** | Ex: 480;565nm, Em: 578nm |
| **Storage buffer** | pH: 7.4 Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Cell preparation containing KRT1 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P04264 |
| **Clone number** | C-11 |
| **Purification technique** | Affinity purification Protein A |
| **Specificity** | ab52460 recognises Cytokeratin peptides 4, 5, 6, 8, 10, 13, 18. |
| **Concentration** | 0.1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |
| **Purification notes** | Prior to conjugation, this antibody was purified by Protein A affinity chromatography. The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography. Purity >95% by SDS-PAGE. |

## Reactivity data

## Flow Cyt (Intra)

### Tested

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|---|---|
| **Species** | Human |
| **Dilution info** | 1 µg/mL |
| **Notes** | ab91357 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## Target data

See full target information KRT1

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|---|---|
| **Function** | May regulate the activity of kinases such as PKC and SRC via binding to integrin beta-1 (ITB1) and the receptor of activated protein C kinase 1 (RACK1). In complex with C1QBP is a high affinity receptor for kininogen-1/HMWK. |

## Storage

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| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | Pan cytokeratin also known as cytokeratin AE1/AE3 is a cytoskeletal protein complex that consists of different keratin polypeptides. It mechanically supports epithelial cells contributing to their structural integrity. The protein mass is variable due to its composite nature ranging between 40 to 67 kDa. Pan cytokeratin is expressed in epithelial tissues throughout the body serving as a reliable marker for identifying epithelial origin cells in histological studies. |
| **Biological function summary** | Keratins in pan cytokeratin contribute to maintaining structural stability within epithelial cells. They act as components of the cytoskeletal network interacting |

| | |
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| | with other cellular structures to provide protection from stress and mechanical damage. Pan cytokeratin exists as part of the intermediate filament protein complex which plays a significant role in cellular mechanics and cohesion essential for tissue integrity. |
| **Pathways** | Intermediate filaments containing pan cytokeratin participate in pathways related to cell differentiation and stress response. Its interactions with other proteins like desmoplakin and plectin link the cytoskeletal filaments to cell membranes and the extracellular matrix. This involvement is important in pathways related to cellular structural integrity and epithelial-mesenchymal transition (EMT). |
| **Associated diseases and disorders** | Pan cytokeratin serves as a critical marker in the diagnosis of epithelial-derived cancers such as carcinoma and conditions like psoriasis. Abnormal expression patterns of pan cytokeratin indicate tumor presence and origin. Its connection to proteins such as E-cadherin and vimentin assists in understanding the progression and metastasis of cancer by facilitating EMT and tissue invasion diagnostics. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

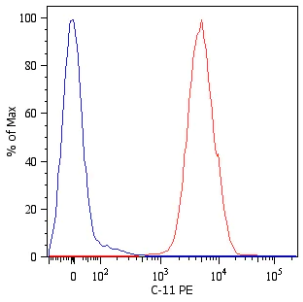
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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## 3 product images

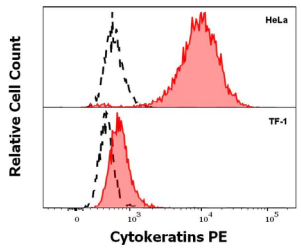



## Flow Cytometry (Intracellular) - PE Anti-pan Cytokeratin antibody [C-11] (ab52460)

Pan Cytokeratin Flow Cytometry (Intracellular) staining using mouse Anti-pan Cytokeratin antibody

Intracellular Flow Cytometry analysis of cytokeratin expression in HT-29 human Caucasian colon adenocarcinoma cell line using ab52460.
Recommended conc. 0.5 µg/ml

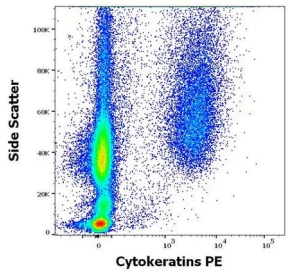
Overlay with Isotype mouse IgG1 control.




## Flow Cytometry (Intracellular) - PE Anti-pan Cytokeratin antibody [C-11] (ab52460)

Pan Cytokeratin Flow Cytometry (Intracellular) staining using mouse Anti-pan Cytokeratin antibody

ab52460 (concentration in sample 7.5 ug/ml, red-filled histogram) binds specifically to intracellular cytokeratins in permeabilized HeLa cells (upper panel), but does not stain permeabilized TF-1 cells (lower panel). Level of non-specific binding was assessed using Mouse IgG1 isotype control PE antibody (MOPC-21) under same conditions (concentration in sample 7.5 ug/ml, black-dashed histogram).




## Flow Cytometry - PE Anti-pan Cytokeratin antibody [C-11] (ab52460)

Pan Cytokeratin Flow Cytometry staining using mouse Anti-pan Cytokeratin antibody

Flow cytometry surface staining pattern of human peripheral whole blood spiked with HeLa cells stained using ab52460 (concentration in sample 7.5 ug/ml).

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