abcam

## ab210372

# PE/Cy7® Anti-CD4 antibody [SK3]

Anti-CD4 antibody [SK3] conjugated to PE/Cy7® - suitable for flow cytometry, and reacts with human samples. Clone [SK3] is a mouse monoclonal antibody and one of the most commonly used clones for flow cytometry.

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## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Conjugation** | PE/Cy7® |
| **Excitation/Emission** | Ex: 565nm, Em: 778nm |
| **Storage buffer** | pH: 7.2 Preservative: 0.09% Sodium azide Constituents: 0.87% Sodium chloride, 0.12% Sodium dihydrogen phosphate, 0.1% Gelatin |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Clone number** | SK3 |
| **Purification technique** | Affinity purification |
| **Light chain type** | kappa |
| **Purification notes** | ab210372 was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. |

## Reactivity data

## Flow Cyt

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 5 µL for $10^5$-$10^8$ Cells |
| **Notes** | The antibody has been diluted for use at 5 µl (0.06 µg) per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 µl. |

### Predicted

| | |
|---|---|
| **Species** | Cynomolgus monkey, Rhesus monkey |
| **Dilution info** | - |
| **Notes** | - |

## Target data

See full target information CD4

**Function**

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages. (Microbial infection) Primary receptor for human immunodeficiency virus-1 (HIV-1) (PubMed:12089508, PubMed:16331979, PubMed:2214026, PubMed:9641677). Down-regulated by HIV-1 Vpu (PubMed:17346169). Acts as a receptor for Human Herpes virus 7/HHV-7 (PubMed:7909607).

## Storage

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

| | |
|---|---|
| **Storage information** | Store in the dark |

## Notes

This antibody does not block binding of alternative clone RPA-T4, suggesting that they recognize different epitopes.This product or portions thereof is manufactured under license from Carnegie Mellon University under U.S. Patent Number 5, 268, 486 and related patents. Cy® and CyDye® are trademarks of Cytiva.

## 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**

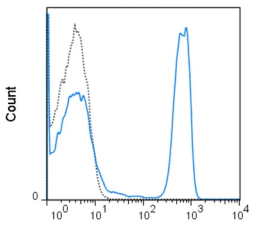
We do not recommend this combination. It is not covered by our product promise.

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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## 1 product image




### Flow Cytometry - PE/Cy7® Anti-CD4 antibody [SK3] (ab210372)

CD4 Flow Cytometry staining using mouse Anti-CD4 antibody

Flow cytometric analysis of Human peripheral blood lymphocytes labeling CD4 with 5 µl (0.06 µg) ab210372 (solid line), compared with 0.06 µg PE/Cy7 Mouse IgG1 isotype control (dashed line).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.