

# CD4 Monoclonal Antibody (SK3 (SK-3)), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	SK3 (SK-3)
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1834401

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	12 Publications

## Product Specific Information

**Description:** The SK3 monoclonal antibody reacts with human CD4, a 59-kDa cell surface receptor expressed by a majority of thymocytes, a subpopulation of mature T helper cells, and, in low levels, monocytes. CD4 is a receptor for the human immunodeficiency virus (HIV). SK3 blocks HIV binding and mixed lymphocyte reaction. The SK3 and RPA-T4 monoclonal antibodies do not cross-block binding, suggesting recognition of distinct epitopes.

**Applications Reported:** This SK3 (SK-3) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This SK3 (SK-3) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

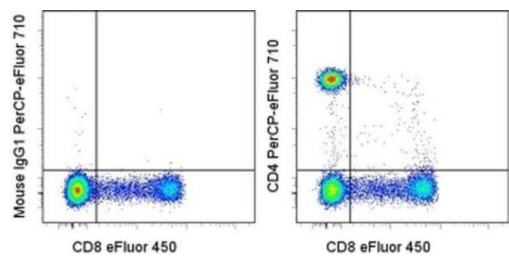
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific

performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (SK3 (SK-3)), PerCP-eFluor™ 710, eBioscience™



**CD4 Antibody (46-0047-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD8a eFluor® 450 (Product # 48-0086-42) and Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (left) or Anti-Human CD4 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

12 References

Flow Cytometry (12)

<p>Cell</p> <p><b>Antigen-Specific Adaptive Immunity to SARS-CoV-2 in Acute COVID-19 and Associations with Age and Disease Severity.</b></p> <p>"46-0047 was used in Flow cytometry/Cell sorting to complete a combined examination of all three branches of adaptive immunity at the level of SARS-CoV-2-specific CD4+ and CD8+ T cell and neutralizing antibody responses in acute and convalescent subjects."</p> <p>Authors: Rydzynski Moderbacher C,Ramirez SI,Dan JM,Grifoni A,Hastie KM,Weiskopf D,Belanger S,Abbott RK,Kim C,Choi J,Kato Y,Crotty EG,Kim C,Rawlings SA,Mateus J,Tse LPV,Frazier A,Baric R,Peters B,Greenbaum J,Ollmann Saphire E,Smith DM,Sette A,Crotty S</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Human</p>
<p>Cell</p> <p><b>Targets of T Cell Responses to SARS-CoV-2 Coronavirus in Humans with COVID-19 Disease and Unexposed Individuals.</b></p> <p>"46-0047 was used in Flow cytometry/Cell sorting to analyze the immune cell responses to SARS-CoV-2 of recovered patients to identify regions of the virus that are targeted and reveal cross-reactivity with other common circulating coronaviruses."</p> <p>Authors: Grifoni A,Weiskopf D,Ramirez SI,Mateus J,Dan JM,Moderbacher CR,Rawlings SA,Sutherland A,Premkumar L,Jadi RS,Marrama D,de Silva AM,Frazier A,Carlin AF,Greenbaum JA,Peters B,Krammer F,Smith DM,Crotty S,Sette A</p>	<p>Year</p> <p>2020</p> <p>Species</p> <p>Human</p>

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