

**PE/iFluor™ 647 Anti-human CD4 Antibody**  
**\*SK3\***Catalog number: 100421Q0, 100421Q1, 100421Q2  
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

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Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

**Antibody Properties**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1, κ
Immunogen	CD4 (Leu-3, T4)
Clone	SK3
Conjugate	PE/iFluor™ 647

**Biological Properties**

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Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 647 under optimal conditions
Application	Flow Cytometry (FACS)

**Spectral Properties**

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Conjugate	PE/iFluor™ 647
Excitation Wavelength	569 nm
Emission Wavelength	666 nm

**Applications**

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SK3 is an anti-human monoclonal antibody that recognizes the CD4 antigen. CD4 (alternatively called T4 or Leu3a) is a 55 kD member of the Ig superfamily that is located on the surface of cells such as macrophages, T cells and granulocytes. CD4 has been associated with important biological processes such as membrane organization, specifically fusion of virus membrane with host plasma membrane. Furthermore, it is involved with vital cellular pathways, for example, the T cell receptor signaling pathway, enzyme linked receptor protein signaling pathway and cytokine-mediated signaling pathway. In some organisms, CD4 acts to positively regulate peptidyl-tyrosine phosphorylation, is an enhancer of

transcription, DNA-templated and is a positive regulator of ERK1 and ERK2 cascade. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as MHC Class II, gp120, IL-16 and Lck. CD4 is a very popular antibody target, with over 180000 publications in the last decade. CD4 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of immunology. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 647 (ex/em = 569/666 nm). It is compatible with the 561 nm laser and 661/20 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant VYB).