

## iFluor™ 430 Anti-human CD4 Antibody \*SK3\*

Catalog number: 10042030, 10042031  
Unit size: 100 tests, 500 tests

### Product Details

|                    |   |
|--------------------|---|
| 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

|                    |                 |
|--------------------|-----------------|
| Species Reactivity | Human           |
| Class              | Primary         |
| Clonality          | Monoclonal      |
| Host               | Mouse           |
| Isotype            | Mouse IgG1, κ   |
| Immunogen          | CD4 (Leu-3, T4) |
| Clone              | SK3             |
| Conjugate          | iFluor™ 430     |

### Biological Properties

|             |  |
|-------------|--|
| Appearance  | Yellow liquid  |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 430 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging  |

### Spectral Properties

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 430 |
| Excitation Wavelength | 433 nm      |
| Emission Wavelength   | 498 nm      |

### Applications

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 iFluor™ 430 (ex/em = 433/498 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ III).