

**iFluor™ 514 Anti-human CD4 Antibody**  
**\*OKT-4\***Catalog number: 10043060, 10043061  
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 igg2b, κ  |
| Immunogen          | CD4 (Leu-3, T4) |
| Clone              | OKT-4           |
| Conjugate          | iFluor™ 514     |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Orange-red liquid                                                                                          |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 514 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 514 |
| Excitation Wavelength | 528 nm      |
| Emission Wavelength   | 555 nm      |

**Applications**

OKT-4 is an anti-human monoclonal antibody that targets the CD4 antigen. CD4 (also known as T4) is a 55 kD member of the Ig superfamily that is located on the surface of cells such as macrophages. In certain organisms, CD4 positively regulates kinase activity, promotes I-kappaB kinase/NF-kappaB signaling and upregulates transcription, DNA-templated. Additionally, it has been thought to be involved with essential

biological processes such as immune response, especially adaptive immune response. CD4 is a member of critical cellular pathways, for instance, the cytokine-mediated signaling pathway, enzyme linked receptor protein signaling pathway and interleukin-15-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with key macromolecules/ligands like Lck and IL-16. CD4 is a very popular antibody target, with over 185000 publications in the last decade. CD4 is frequently 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™ 514 (ex/em = 528/555 nm). It is compatible with the 532 nm laser and 575/36 nm bandpass filter (for example, as in the Thermo Fisher Attune NxT).