

**iFluor™ 820 Anti-human CD3 Antibody**  
**\*SK7\***Catalog number: 100330P0, 100330P1  
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       |
| Immunogen          | CD3e (T3E)  |
| Clone              | SK7         |
| Conjugate          | iFluor™ 820 |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Green liquid                                                                                               |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 820 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 820 |
| Excitation Wavelength | 822 nm      |
| Emission Wavelength   | 850 nm      |

**Applications**

The SK7 monoclonal antibody reacts with human CD3e, a 20 kD member of the Ig superfamily often found on the surface of t cells, tregs and nkt cells. In many organisms, CD3 positively regulates interleukin-2 biosynthetic process, enhances cell-matrix adhesion and is a positive regulator of gene expression. Moreover, it plays a role in essential cellular pathways, for example, the T cell receptor signaling pathway, negative regulation of smoothened signaling pathway and apoptotic signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like TCR. CD3 is a very popular antibody target, with over 80000 publications in the last decade.

CD3e is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, particularly in the study of immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 820 (ex/em = 822/850 nm).