

**iFluor™ 405 Anti-human CD3 Antibody**  
**\*SK7\***Catalog number: 10033020, 10033021  
Unit size: 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
Immunogen	CD3e (T3E)
Clone	SK7
Conjugate	iFluor™ 405

**Biological Properties**

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Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

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Conjugate	iFluor™ 405
Excitation Wavelength	403 nm
Emission Wavelength	427 nm

**Applications**

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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™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 450/50 nm bandpass filter (for example, as in the BD FACSCelesta™).