



T7-173-T100

Monoclonal Antibody to CD3 PE-Cy™7 conjugated (100 tests)

Clone:	SK7
Isotype:	Mouse IgG1
Specificity:	<p>The mouse monoclonal antibody SK7 recognizes the CD3 antigen of the TCR/CD3 complex on mature human T cells. This antibody reacts with the epsilon chain of the CD3 complex. The monoclonal antibodies SK7 and UCHT1 recognize overlapping epitopes.</p> <p>HLDA II; WS Code T118 HLDA III; WS Code T492</p>
Regulatory Status:	RUO
Immunogen:	Human thymocytes
Species Reactivity:	Human, Non-Human Primates
Preparation:	The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	<p>The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.</p> <p>The content of a vial (0.4 ml) is sufficient for 100 tests.</p>
Expiration:	See vial label
Lot Number:	See vial label
Background:	<p>CD3 complex is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation.</p> <p>The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases.</p>

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

- References:**
- *Wood GS, Burns BF, Dorfman RF, Warnke RA: The immunohistology of non-T cells in the acquired immunodeficiency syndrome. *Am J Pathol.* 1985 Sep;120(3):371-9.
 - *Li B, Wang H, Dai J, Ji J, Qian W, Zhang D, Hou S, Guo Y: Construction and characterization of a humanized anti-human CD3 monoclonal antibody 12F6 with effective immunoregulation functions. *Immunology.* 2005 Dec;116(4):487-98.
 - *Recio MJ, Moreno-Pelayo MA, Kiliç SS, Guardo AC, Sanal O, Allende LM, Pérez-Flores V, Mencía A, Modamio-Høybjør S, Seoane E, Regueiro JR: Differential biological role of CD3 chains revealed by human immunodeficiencies. *J Immunol.* 2007 Feb 15;178(4):2556-64.
 - *Guttman-Yassky E, Vugmeyster Y, Lowes MA, Chamian F, Kikuchi T, Kagen M, Gilleaudeau P, Lee E, Hunte B, Howell K, Dummer W, Bodary SC, Krueger JG: Blockade of CD11a by efalizumab in psoriasis patients induces a unique state of T-cell hyporesponsiveness. *J Invest Dermatol.* 2008 May;128(5):1182-91.
 - *Qiao D, Li L, Guo J, Lao S, Zhang X, Zhang J, Wu C: Mycobacterium tuberculosis culture filtrate protein 10-specific effector/memory CD4⁺ and CD8⁺ T cells in tubercular pleural fluid, with biased usage of T cell receptor Vβ chains. *Infect Immun.* 2011 Aug;79(8):3358-65.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

Cy™ and CyDye™ are registered trademarks of GE Healthcare.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz