TECHNICAL DATA SHEET

CyFlow™ CD3 PE-Cy7

Anti-Hu; Clone SK7

REF **BQ006366**

Sysmex Partec GmbH
Arndtstraße 11 a-b
02826 Görlitz
Germany
Tel.: +49 3581 8746 0
E-mail: info@sysmex-partec.com
www.sysmex-partec.com

Distributed in the U.S.A. and Canada by:
Sysmex America, Inc.
577 Aptakisic Road
Lincolnshire, IL 60069, U.S.A.
Tel.: 1-888-879-7639 or 1-847-367-3503
E-mail: cytometry@sysmex.com
https://us.sysmex-flowcytometry.com/

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD3
Alternative Names	T3, Leu4
Clone	SK7
Clonality	monoclonal
Format	PE-Cy7
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human thymocytes

Specificity

The mouse monoclonal antibody SK7 recognizes CD3 antigen of the TCR/CD3 complex on mature human T cells. This antibody reacts with the ε chain of the CD3 complex. The monoclonal antibodies SK7 and UCHT1 recognize overlapping epitopes.

HLDA II—WS Code T118

HLDA III—WS Code T492

Application

The reagent is designed for flow cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.09% (w/v) sodium azide and 0.2% (w/v) BSA.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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 CD3γ, CD3 δ, CD3ε and CD3ζ. These CD3 subunits are structurally related members of the immunoglobulins superfamily 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. 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.

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at http://www.sysmex-partec.com/services, or at https://us.sysmex-flowcytometry.com/ (U.S. customers only).

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. < PMID: 3898858 >
- 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. < PMID: 16313362 >
- 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. < PMID: 17277165 >
- 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. < PMID: 18239614 >

Symbols

	Reference number		Contains sufficient for <n> tests
	For research use only		Temperature limit
	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier

Cy and CyDye are trademarks of GE Healthcare.