

TECHNICAL DATA SHEET

CyFlow™ TCR alpha/beta FITC Anti-Hu; Clone IP26

REF BU176825

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	TCR α/β
Alternative Names	—
Clone	IP26
Clonality	monoclonal
Format	FITC
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	< no data >

Specificity

The mouse monoclonal antibody IP26 recognizes a monomorphic determinant of TCR α/β antigen, the dominant subtype of T cell receptor expressed in human peripheral blood.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 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 0.1% (w/v) sodium azide.

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

The antigen-specific T cell receptor (TCR) is composed of either α and β subunit, or γ and δ subunit. Majority of T cells present in the blood, lymph and secondary lymphoid organs express TCR α/β heterodimers, whereas the T cells expressing TCR γ/δ heterodimers are localized mainly in epithelial tissues and at the sites of infection. The subunits of TCR heterodimers are covalently bonded and in the endoplasmic reticulum they associate with CD3 subunits to form functional TCR-CD3 complex. Lack of expression of any of the chains is sufficient to stop cell surface expression.

References

- von Boehmer H: T cell development and selection in the thymus. Bone Marrow Transplant. 1992; 9 Suppl 1:46-8. < PMID: 1324045 >
- Levelt CN, Wang B, Ehrfeld A, Terhorst C, Eichmann K: Regulation of T cell receptor (TCR)-beta locus allelic exclusion and initiation of TCR-alpha locus rearrangement in immature thymocytes by signaling through the CD3 complex. Eur J Immunol. 1995 May; 25(5):1257-61. < PMID: 7774628 >
- Michie AM, Zúñiga-Pflücker JC: Regulation of thymocyte differentiation: pre-TCR signals and beta-selection. Semin Immunol. 2002 Oct; 14(5):311-23. < PMID: 12220932 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- Huet D, Bagot M, Loyaux D, Capdevielle J, Conraux L, Ferrara P, Bensussan A, Marie-Cardine A: SC5 mAb represents a unique tool for the detection of extracellular vimentin as a specific marker of Sezary cells. J Immunol. 2006 Jan 1; 176(1):652-9. < PMID: 16365461 >
- Ortonne N, Huet D, Gaudiez C, Marie-Cardine A, Schiavon V, Bagot M, Musette P, Bensussan A: Significance of circulating T-cell clones in Sezary syndrome. Blood. 2006 May 15; 107(10):4030-8. < PMID: 16418328 >
- Chentouf M, Ghannam S, Bés C, Troadec S, Cérutti M, Chardés T: Recombinant anti-CD4 antibody 13B8.2 blocks membrane-proximal events by excluding the Zap70 molecule and downstream targets SLP-76, PLC gamma 1, and Vav-1 from the CD4-segregated Brij 98 detergent-resistant raft domains. J Immunol. 2007 Jul 1; 179(1):409-20. < PMID: 17579062 >
- Sullivan BM, Coscoy L: Downregulation of the T-cell receptor complex and impairment of T-cell activation by human herpesvirus 6 u24 protein. J Virol. 2008 Jan; 82(2):602-8. < PMID: 17977973 >
- Croxford AL, Akilli-Ozturk O, Rieux-Laucat F, Förster I, Waisman A, Buch T: MHC-restricted T cell receptor signaling is required for alpha beta TCR replacement of the pre T cell receptor. Eur J Immunol. 2008 Feb; 38(2):391-9. < PMID: 18203137 >
- Kuttruff S, Koch S, Kelp A, Pawelec G, Rammensee HG, Steinle A: Nkp80 defines and stimulates a reactive subset of CD8 T cells. Blood. 2009 Jan 8; 113(2):358-69. < PMID: 18922855 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com