

TECHNICAL DATA SHEET

CyFlow™ CD27 PE Anti-Hu; Clone LT27

REF BN607172

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD27
Alternative Names	T14, S152, TP55, TNFRSF7
Clone	LT27
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG2a
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human peripheral blood lymphocytes

Specificity

The mouse monoclonal antibody LT27 recognizes CD27 antigen, a 50-55 kDa type I transmembrane glycoprotein (member of the TNF-receptor superfamily) expressed on medullary thymocytes, peripheral T lymphocytes, some B lymphocytes and NK cells.

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

CD27 is a transmembrane 55 kDa protein of the nerve growth factor-receptor family, expressed as a disulfide-linked homodimer on mature thymocytes, peripheral blood T cells and a subpopulation of B cells. Activation of T cells via TCR-CD3 complex results in upregulation of CD27 expression on the plasma membrane as well as in the release of its soluble 28-32 kDa form, sCD27, detected in the plasma, urine or spinal fluid. This sCD27 is an important prognostic marker of acute and chronic B cell malignancies. RgpA, a cystein proteinase, although activating T cells through the protease-activated receptors (PARs), degrades CD27 and counteracts T cell activation mediated by CD27 and its ligand CD70.

References

- van Oers MH, Pals ST, Evers LM, van der Schoot CE, Koopman G, Bonfrer JM, Hintzen RQ, von dem Borne AE, van Lier RA: Expression and release of CD27 in human B-cell malignancies. Blood. 1993 Dec 1; 82(11):3430-6. < PMID: 8241510 >
- Doussis IA, Gatter KC, Mason DY: CD68 reactivity of non-macrophage derived tumours in cytological specimens. J Clin Pathol. 1993 Apr; 46(4):334-6. < PMID: 7684403 >
- Molica S, Vitelli G, Levato D, Crispino G, Dell'Olio M, Dattilo A, Matera R, Gandolfo GM, Musto P: CD27 in B-cell chronic lymphocytic leukemia: Cellular expression, serum release and correlation with other

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

soluble molecules belonging to nerve growth factor receptors (NGFr) superfamily. Haematologica. 1998 May; 83(5):398-402I. < PMID: 9658722 >

- Kara IO, Sahin B, Gunesacar R: Expression of soluble CD27 and interleukins-8 and -10 in B-cell chronic lymphocytic leukemia: correlation with disease stage and prognosis. Adv Ther. 2007 Jan-Feb; 24(1):29-40. < PMID: 17526459 >
- Yun LW, Decarlo AA, Hunter N: Blockade of protease-activated receptors on T cells correlates with altered proteolysis of CD27 by gingipains of Porphyromonas gingivalis. Clin Exp Immunol. 2007 Nov; 150(2):217-29. < PMID: 17937677 >

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