

TECHNICAL DATA SHEET

CyFlow™ CD2 PE-Cy7 Anti-Hu; Clone TS1/8

REF CC367904

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD2
Alternative Names	LFA-2
Clone	TS1/8
Clonality	monoclonal
Format	PE-Cy7
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Cytotoxic T lymphocytes

Specificity

The mouse monoclonal antibody TS1/8 recognizes CD2 antigen, a 50 kDa glycoprotein present on the human peripheral blood T lymphocytes and NK cells; also expressed by all thymocytes.

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 4 µl reagent / 100 µl of whole blood or 10⁶ 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 0.1% (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

CD2 (LFA-2) belongs to T lymphocyte glycoproteins of immunoglobulin superfamily. Its interaction with CD58 stabilizes adhesion between T cells and antigen presenting or target cells. Relatively low affinity of CD2 to CD58 (as measured in solution) is compensated within the two-dimensional cell-cell interface to provide tight adhesion. Moreover, T cell activation induces increased CD2 expression and its lateral mobility, making easier contact between CD2 and CD58. Subsequently, T cell activation causes fixation of CD58-CD2 at sites of cell-cell contact, thereby strengthening intercellular adhesion. CD2 deficiency reduces intestinal inflammation and helps to control infection.

References

- Sanchez-Madrid F, Krensky AM, Ware CF, Robbins E, Strominger JL, Burakoff SJ, Springer TA: Three distinct antigens associated with human T-lymphocyte-mediated cytotoxicity: LFA-1, LFA-2, and LFA-3. Proc Natl Acad Sci USA. 1982 Dec; 79(23):7489-93. < PMID: 6984191 >
- Vollger LW, Tuck DT, Springer TA, Haynes BF, Singer KH: Thymocyte binding to human thymic epithelial cells is inhibited by monoclonal antibodies to CD-2 and LFA-3 antigens. J Immunol. 1987 Jan 15; 138(2):358-63. < PMID: 3098838 >
- 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 >

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- Zhang B, Dai M, Li QJ, Zhuang Y: Tracking proliferative history in lymphocyte development with cre-mediated sister chromatid recombination. PLoS Genet. 2013 Oct; 9(10):e1003887. < PMID: 24204301 >

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

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