

## 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

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

#### Contact Information:

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## 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.

## 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<sup>6</sup> 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

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	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 >

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- 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 >
- 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 >

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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