

TECHNICAL DATA SHEET

CyFlow™ CD2 Purified Anti-Hu; Clone TS1/8

REF AM526969

**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 | Purified |
| Host / Isotype | Mouse / IgG1 |
| Species Reactivity | Human |
| Negative Species Reactivity | — |
| Quantity [Concentration] | 0.1 mg [1 mg/ml] |
| Immunogen | Cytotoxic T lymphocytes |

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

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

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Functional assays

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH \approx 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 >

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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 >

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

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