

T7-745-T025

Monoclonal Antibody to CD2 PE-Cy[™]7 conjugated (25 tests)

Clone: TS1/8

Isotype: Mouse IgG1

Specificity: The mouse monoclonal antibody TS1/8 recognizes CD2, a 50 kDa glycoprotein

present on the human peripheral blood T lymphocytes and NK cells; also

expressed by all thymocytes.

HLDA V; WS Code S025

Regulatory Status: RUO

Immunogen: Cytotoxic T lymphocytes

Species Reactivity: Human

Preparation: The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

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

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD2 (also known as 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: *Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).

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.

*Sanchez-Madrid F, Krensky AM, Ware CF, Robbins E, Strominger JL, Burakoff SJ, Springer TA: Three distinct antigens associated with human T-lymphocyte-mediated cytolysis: LFA-1, LFA-2, and LFA-3. Proc Natl Acad Sci U

S A. 1982 Dec;79(23):7489-93.

*Zhang B, Dai M, Li QJ, Zhuang Y: Tracking proliferative history in lymphocyte development with cre-mediated sister chromatid recombination. PLoS Genet. 2013

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