

1P-492-T100

Monoclonal Antibody to CD2 Phycoerythrin (PE) conjugated (100 tests)

Clone:	LT2
Isotype:	Mouse IgG2b
Specificity:	The antibody LT2 reacts with CD2, a 50 kDa glycoprotein present on the human peripheral blood T lymphocytes and NK cells; also expressed by all thymocytes. HLDA VI; WS Code T 6T-008
Regulatory Status:	RUO
Immunogen:	Normal human blood lymphocytes.
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with R-Phycoerythrin (PE) 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 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD2 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.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies

- References:**
- *Dustin ML: Adhesive bond dynamics in contacts between T lymphocytes and glass-supported planar bilayers reconstituted with the immunoglobulin-related adhesion molecule CD58. *J Biol Chem.* 1997 Jun 20;272(25):15782-8.
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 - *Pawlowski NN, Struck D, Grollich K, Kuhl AA, Zeitz M, Liesenfeld O, Hoffmann JC.: CD2 deficiency partially prevents small bowel inflammation and improves parasite control in murine *Toxoplasma gondii* infection. *World J Gastroenterol.* 2007 Aug 21;13(31):4207-13.
 - Filatov AV, Bachurin PS, Markova NA, Surnakova NE: [A panel of monoclonal antibodies against human lymphocyte antigens] *Eksp Onkol.* 1989;11(2):28-32.
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 - *Gannon GA, Rhind SG, Suzui M, Zamecnik J, Sabiston BH, Shek PN, Shephard RJ: beta-Endorphin and natural killer cell cytolytic activity during prolonged exercise. Is there a connection? *Am J Physiol.* 1998 Dec;275(6 Pt 2):R1725-34.
 - *Lin CW, Liu TY, Chen SU, Wang KT, Medeiros LJ, Hsu SM: CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. *Blood.* 2005 Nov 15;106(10):3567-74.

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