



11-201-C025

Monoclonal Antibody to CD2 Purified Antibody (0.025 mg)

Clone:	MEM-65
Isotype:	Mouse IgG1
Specificity:	The antibody MEM-65 recognizes a unique epitope of 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-012
Regulatory Status:	RUO
Immunogen:	Human peripheral T cells.
Species Reactivity:	Human
Application:	Flow Cytometry Recommended dilution: 1-5 µg/ml Immunoprecipitation
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
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.
- *Zhu DM, Dustin ML, Cairo CW, Thatte HS, Golan DE: Mechanisms of Cellular Avidity Regulation in CD2-CD58-Mediated T Cell Adhesion. *ACS Chem Biol.* 2006 Nov 21;1(10):649-58.
- *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.
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Drbal K, Hilgert I, Cebecauer M, Angelisova P, Horejsi V: New monoclonal antibodies to human leucocyte surface molecule CD2. *Folia Biol (Praha).* 1997;43(6):245-6.
- *Ilangumaran S, Briol A, Hoessli DC: CD44 selectively associates with active Src family protein tyrosine kinases Lck and Fyn in glycosphingolipid-rich plasma membrane domains of human peripheral blood lymphocytes. *Blood.* 1998 May 15;91(10):3901-8.
- *Espagnolle N, Depoil D, Zaru R, Demeur C, Champagne E, Guiraud M, Valitutti S: CD2 and TCR synergize for the activation of phospholipase Cgamma1/calcium pathway at the immunological synapse. *Int Immunol.* 2007 Mar;19(3):239-48.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

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

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz