EXBIO Antibodies

PRODUCT DATA SHEET

1F-577-T025

Monoclonal Antibody to CD28 Fluorescein (FITC) conjugated (25 tests)

Clone: CD28.2

Isotype: Mouse IgG1

Specificity: The antibody CD28.2 reacts with CD28, a disulfide-linked homodimeric type I glycoprotein (monomer of Mw 44 kDa) which is a critical costimulatory receptor of T cells.
HLDA V.; WS Code 5T CD28.05

Immunogen: DC28.1.3.3 murine T cell hybridoma transfected with human CD28 cDNA

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

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.
Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

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 (0.5 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD28 is the critical T cell costimulatory receptor which provides to the cell the important second activation signal by binding CD80 and CD86 that are expressed by antigen presenting cells. Besides its costimulation role CD28 functions in preventing T cells from anergic hyporesponsive state or from undergoing premature apoptotic cell death. CD28 is also expressed on human fetal NK cells and some NK cell lines, whereas on murine NK cells the CD28 expression is much broader.

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

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References:

*Nunès J, Klasen S, Ragueneau M, Pavon C, Couez D, Mawas C, Bagnasco M, Olive D: CD28 mAbs with distinct binding properties differ in their ability to induce T cell activation: analysis of early and late activation events. Int Immunol. 1993 Mar;5(3):311-5.
*Nunes J, Klasen S, Franco MD, Lipcey C, Mawas C, Bagnasco M, Olive D: Signalling through CD28 T-cell activation pathway involves an inositol phospholipid-specific phospholipase C activity. Biochem J. 1993 Aug 1;293 (Pt 3):835-42.
*Schlossman, S., et al., Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
*Galea-Lauri J, Darling D, Gan SU, Krivochtchapov L, Kuiper M, Gäken J, Souberbielle B, Farzaneh F: Expression of a variant of CD28 on a subpopulation of human NK cells: implications for B7-mediated stimulation of NK cells. J Immunol. 1999 Jul 1;163(1):62-70.
*Tazi A, Moreau J, Bergeron A, Dominique S, Hance AJ, Soler P: Evidence that Langerhans cells in adult pulmonary Langerhans cell histiocytosis are mature dendritic cells: importance of the cytokine microenvironment. J Immunol. 1999 Sep 15;163(6):3511-5.
*Marti F, Krause A, Post NH, Lyddane C, Dupont B, Sadelain M, King PD: Negative-feedback regulation of CD28 costimulation by a novel mitogen-activated protein kinase phosphatase, MKP6. J Immunol. 2001 Jan 1;166(1):197-206.
*Scharschmidt E, Wegener E, Heissmeyer V, Rao A, Krappmann D: Degradation of Bcl10 induced by T-cell activation negatively regulates NF-kappa B signaling. Mol Cell Biol. 2004 May;24(9):3860-73.
*Jeong SH, Qiao M, Nascimbeni M, Hu Z, Rehermann B, Murthy K, Liang TJ. Immunization with hepatitis C virus-like particles induces humoral and cellular immune responses in nonhuman primates. J Virol. 2004 Jul;78(13):6995-7003.
*And other.

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