



A7-577-T100

## Monoclonal Antibody to CD28 Alexa Fluor® 700 conjugated (100 tests)

<b>Clone:</b>	CD28.2
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	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
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	DC28.1.3.3 murine T cell hybridoma transfected with human CD28 cDNA
<b>Species Reactivity:</b>	Human, Non-Human Primates
<b>Preparation:</b>	The purified antibody is conjugated with Alexa Fluor® 700 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	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.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	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.**

**Antibodies****References:**

- \*Nunes 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, Krivochtchaporov 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, Reherrmann 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.

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](http://www.exbio.cz).

This product is provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Exbio Praha, a.s., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity), including use in flow cytometry that does not utilize a bead based array, but excluding use in combination with microarrays or High Content Screening. The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

**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](mailto:orders@exbio.cz) | [www.exbio.cz](http://www.exbio.cz)