



PC-531-T100

## Monoclonal Antibody to CD86 PerCP (100 tests)

<b>Clone:</b>	BU63
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	<p>The antibody BU63 reacts with CD86 (B7-2), a 70 kDa type I transmembrane glycoprotein of immunoglobulin supergene family, expressed on professional antigen-presenting cells, such as dendritic cells, macrophages or activated B lymphocytes.</p> <p>HLDA V; WS Code BP BP072 HLDA V; WS Code A A109 HLDA VI; WS Code BP 95 HLDA VI; WS Code B CD86.9</p>
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	B-lymphoblastoid cell line ARH 77
<b>Species Reactivity:</b>	Human, Other not determined
<b>Preparation:</b>	The purified antibody is conjugated with Peridinin-chlorophyll-protein complex (PerCP) 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>	<p>The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.</p> <p>The content of a vial (1 ml) is sufficient for 100 tests.</p>
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	<p>CD80 (B7-1) and CD86 (B7-2) are ligands of T cell critical costimulatory molecule CD28 and of an inhibitory receptor CTLA-4 (CD152). The both B7 molecules are expressed on professional antigen-presenting cells and are essential for T cell activation, the both molecules can also substitute for each other in this process. The question what are the differences in CD80 and CD86 competency has not been fully elucidated yet; there are still conflicts in results about their respective roles in initiation or sustaining of the T cell immune response.</p>

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

**Antibodies****References:**

- \*Vasilevko V, Ghochikyan A, Holterman MJ, Agadjanyan MG: CD80 (B7-1) and CD86 (B7-2) are functionally equivalent in the initiation and maintenance of CD4+ T-cell proliferation after activation with suboptimal doses of PHA. *DNA Cell Biol.* 2002 Mar;21(3):137-49.
- \*Yadav D, Judkowski V, Flodstrom-Tullberg M, Sterling L, Redmond WL, Sherman L, Sarvetnick N: B7-2 (CD86) controls the priming of autoreactive CD4 T cell response against pancreatic islets. *J Immunol.* 2004 Sep 15;173(6):3631-9.
- \*Thomas IJ, Petrich de Marquesini LG, Ravanan R, Smith RM, Guerder S, Flavell RA, Wraith DC, Wen L, Wong FS: CD86 has sustained costimulatory effects on CD8 T cells. *J Immunol.* 2007 Nov 1;179(9):5936-46.
- \*Eri R, Kodumudi KN, Summerlin DJ, Srinivasan M: Suppression of colon inflammation by CD80 blockade: Evaluation in two murine models of inflammatory bowel disease. *Inflamm Bowel Dis.* 2008 Jan 9
- \*Engel P, Gribben JG, Freeman GJ, Zhou LJ, Nozawa Y, Abe M, Nadler LM, Wakasa H, Tedder TF: The B7-2 (B70) costimulatory molecule expressed by monocytes and activated B lymphocytes is the CD86 differentiation antigen. *Blood.* 1994 Sep 1;84(5):1402-7.
- \*Caux C, Vanbervliet B, Massacrier C, Azuma M, Okumura K, Lanier LL, Banchereau J: B70/B7-2 is identical to CD86 and is the major functional ligand for CD28 expressed on human dendritic cells. *J Exp Med.* 1994 Nov 1;180(5):1841-7.
- \*Mauri D, Wyss-Coray T, Gallati H, Pichler WJ: Antigen-presenting T cells induce the development of cytotoxic CD4+ T cells. I. Involvement of the CD80-CD28 adhesion molecules. *J Immunol.* 1995 Jul 1;155(1):118-27.
- \*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
- \*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- \*Giguere JF, Bounou S, Paquette JS, Madrenas J, Tremblay MJ: Insertion of host-derived costimulatory molecules CD80 (B7.1) and CD86 (B7.2) into human immunodeficiency virus type 1 affects the virus life cycle. *J Virol.* 2004 Jun;78(12):6222-32.
- \*Zhan H, Towler HM, Calder VL: The immunomodulatory role of human conjunctival epithelial cells. *Invest Ophthalmol Vis Sci.* 2003 Sep;44(9):3906-10.
- \*Kolar GR, Mehta D, Pelayo R, Capra JD: A novel human B cell subpopulation representing the initial germinal center population to express AID. *Blood.* 2007 Mar 15;109(6):2545-52.
- \*Hovden AO, Karlsen M, Jonsson R, Aarstad HJ, Appel S: Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. *BMC Immunol.* 2011 Jan 5;12:2.
- \*Chan A, Baird M, Mercer AA, Fleming SB: Maturation and function of human dendritic cells are inhibited by orf virus-encoded interleukin-10. *J Gen Virol.* 2006 Nov;87(Pt 11):3177-81.
- \*And many 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).

**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)