

1A-637-T025

Monoclonal Antibody to CD180 Allophycocyanin (APC) conjugated (25 tests)

Clone:	G28-8
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody G28-8 recognizes CD180, a 95-105 kDa TLR-like glycoprotein expressed on peripheral blood monocytes and dendritic cells, mantle zone B cells and marginal zone B cells, but very weakly on germinal center B cells.
Regulatory Status:	RUO
Immunogen:	Human tonsillar B cells
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with cross-linked Allophycocyanin (APC) 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 10 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.25 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD180, also known as RP105 (or Bgp95, LY64) is a type I membrane glycoprotein of Toll-like receptor (TLR) family. Its cytoplasmic tail is short and unlike the TLRs, it lacks the TIR domain. CD180 expression is dependent on the coexpression of its helper molecule, MD-1, and mirrors that of TLR4 on antigen-presenting cells. CD180 regulates recognition of LPS and signaling in B cells, via interacting directly with the TLR4 signaling complex, inhibiting its ability to bind microbial ligands. Ligation of CD180 by monoclonal antibodies leads to B cell activation, upregulation of CD80/CD86, and increase in cell size.

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

**Antibodies****References:**

- *Divanovic S, Trompette A, Atabani SF, Madan R, Golenbock DT, Visintin A, Finberg RW, Tarakhovskiy A, Vogel SN, Belkaid Y, Kurt-Jones EA, Karp CL: Negative regulation of Toll-like receptor 4 signaling by the Toll-like receptor homolog RP105. *Nat Immunol.* 2005 Jun;6(6):571-8.
- *Yazawa N, Fujimoto M, Sato S, Miyake K, Asano N, Nagai Y, Takeuchi O, Takeda K, Okochi H, Akira S, Tedder TF, Tamaki K: CD19 regulates innate immunity by the toll-like receptor RP105 signaling in B lymphocytes. *Blood.* 2003 Aug 15;102(4):1374-80.
- *Divanovic S, Trompette A, Petiniot LK, Allen JL, Flick LM, Belkaid Y, Madan R, Haky JJ, Karp CL: Regulation of TLR4 signaling and the host interface with pathogens and danger: the role of RP105. *J Leukoc Biol.* 2007 Aug;82(2):265-71.
- *Kikuchi Y, Koarada S, Tada Y, Ushiyama O, Morito F, Suzuki N, Ohta A, Horiuchi T, Miyake K, Nagasawa K: Difference in B cell activation between dermatomyositis and polymyositis: analysis of the expression of RP105 on peripheral blood B cells. *Ann Rheum Dis.* 2001 Dec;60(12):1137-40.
- *Valentine MA, Clark EA, Shu GL, Norris NA, Ledbetter JA: Antibody to a novel 95-kDa surface glycoprotein on human B cells induces calcium mobilization and B cell activation. *J Immunol.* 1988 Jun 15;140(12):4071-8.
- *Clark EA, Shu GL, Lüscher B, Draves KE, Banchereau J, Ledbetter JA, Valentine MA: Activation of human B cells. Comparison of the signal transduced by IL-4 to four different competence signals. *J Immunol.* 1989 Dec 15;143(12):3873-80.
- *Olson NE, Graves JD, Shu GL, Ryan EJ, Clark EA: Caspase activity is required for stimulated B lymphocytes to enter the cell cycle. *J Immunol.* 2003 Jun 15;170(12):6065-72.

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