



1A-637-T100

Monoclonal Antibody to CD180 Allophycocyanin (APC) conjugated (100 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 (1 ml) is sufficient for 100 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.

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**Antibodies****References:**

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- *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.

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