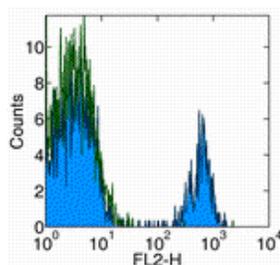


## Anti-Human CD180 (RP105) PE

**Catalog Number:** 12-1809

**Also Known As:** RP-105, Toll-like Receptor, TLR Family

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control PE (cat. 12-4714) (open histogram) or Anti-Human CD180 (RP105) PE (closed histogram). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Human CD180 (RP105) PE

**REF** **Catalog Number:** 12-1809

**Clone:** MHR73-11

**Concentration:** 5  $\mu$ L (0.5  $\mu$ g)/test

**Host/Isotype:** Mouse IgG1, kappa

**HLDA Workshop:** N/A

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material.

**LOT** **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

### Description

The MHR73-11 monoclonal antibody reacts with human CD180 (RP105). This 105 kDa type I transmembrane molecule is a member of the TLR family of proteins characterized by an extracellular domain with leucine-rich repeats and a cytoplasmic domain with homology to the type I IL-1 receptor. RP105 physically associates with another molecule called MD-1 and is expressed on B, monocytes/macrophages, and dendritic cells. Histological studies show that RP105 is expressed mainly on mature B cells in mantle zones, while germinal center cells are either dull or negative. The RP105/MD-1 complex in concert with TLR4 mediates B cell recognition and signaling of LPS. MHR73-11 activates B cells, leading to increases in cell size, expression of the costimulatory molecule CD80, and DNA synthesis. Moreover, ligation of RP105 protects B cells from irradiation- or dexamethasone-induced apoptosis. Thus, RP105 is a signal transduction molecule and plays a role in regulation of B cell growth and death. A significant proportion of circulating B cells in SLE patients is RP105 negative. Loss of RP105 is associated with B cell activation and increased disease activity in SLE patients.

### Applications Reported

MHR73-11 has been reported for use in flow cytometric analysis.

### Applications Tested

This MHR73-11 antibody has been pre-titrated and tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at 5  $\mu$ L (0.5  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

### References

Koarada S, Tada Y, Ushiyama O, Morito F, Suzuki N, Ohta A, Miyake K, Kimoto M, Nagasawa K. B cells lacking RP105, a novel B cell antigen, in systemic lupus erythematosus. *Arthritis Rheum.* 1999 Dec;42(12):2593-600.

Miura Y, Shimazu R, Miyake K, Akashi S, Ogata H, Yamashita Y, Narisawa Y, Kimoto M. RP105 is associated with MD-1 and transmits an activation signal in human B cells. *Blood.* 1998 Oct 15;92(8):2815-22.

Miura Y, Miyake K, Yamashita Y, Shimazu R, Copeland NG, Gilbert DJ, Jenkins NA, Inazawa J, Abe T, Kimoto M. Molecular cloning of a human RP105 homologue and chromosomal localization of the mouse and human RP105 genes (Ly64 and LY64). *Genomics.* 1996 Dec 15;38(3):299-304

### Related Products

12-4714 Mouse IgG1 K Isotype Control PE (P3.6.2.1)

14-8185 B18R Recombinant Protein

---

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • [www.eBioscience.com](http://www.eBioscience.com) • [info@eBioscience.com](mailto:info@eBioscience.com)