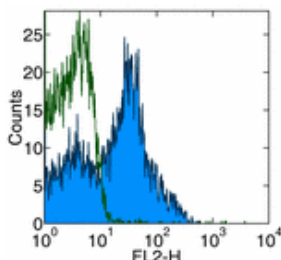


## Anti-Mouse CD180 (RP105) Purified

Catalog Number: 14-1801

Also Known As: RP-105, Toll-like Receptor, TLR Family, LY-78

RUO: For Research Use Only



Surface staining of mouse splenocytes with Anti-Mouse CD180 (RP105) PE. Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Mouse CD180 (RP105) Purified

**REF** Catalog Number: 14-1801

Clone: RP/14

Concentration: 0.5 mg/ml

Host/Isotype: Rat IgG2a,  $\kappa$

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



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

### Description

The RP/14 monoclonal antibody reacts with mouse 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 mature B cells, monocytes/macrophages and dendritic cells. Ligation of RP105 with RP/14 protects B cells from irradiation- or dexamethasone-induced apoptosis, and drives them to proliferate. B cells activated by RP105-ligation arrest their growth and undergo apoptosis when the antigen receptor is engaged. The RP105/MD-1 complex in concert with TLR4 mediates B cell recognition and signaling of LPS. Thus, RP105 is a signal transduction molecule and plays a role in regulation of B cell growth and death.

### Applications Reported

The RP/14 antibody has been reported for use in flow cytometric analysis, and immunoprecipitation. It has also been reported in B cell activation in functional studies. (Please use Functional Grade purified RP/14, cat. 16-1801, in functional assays.)

### Applications Tested

The RP/14 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

- Miyake, K., Y. Yamashita, et al. 1995. RP105, a novel B cell surface molecule implicated in B cell activation, is a member of the leucine-rich repeat protein family. *J Immunol* 154(7): 3333-40.
- Miyake, K., R. Shimazu, et al. 1998. Mouse MD-1, a molecule that is physically associated with RP105 and positively regulates its expression. *J Immunol* 161(3): 1348-53.
- Ogata, H., I. Su, et al. 2000. The toll-like receptor protein RP105 regulates lipopolysaccharide signaling in B cells. *J Exp Med* 192(1): 23-9.

### Related Products

- 11-4317 Streptavidin FITC
- 11-4811 Anti-Rat IgG FITC
- 12-4317 Streptavidin PE
- 13-4813 Anti-Rat IgG Biotin (Polyclonal)
- 14-4321 Rat IgG2a K Isotype Control Purified
- 14-8185 B18R Recombinant Protein

17-4317 Streptavidin APC  
34-8185 B18R Recombinant Protein Carrier-Free

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