

## Product datasheet for **SM1823PS**

### CD180 / RP105 Rat Monoclonal Antibody [Clone ID: RP/14]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	RP/14
Applications:	FC, FN
Recommended Dilution:	Flow cytometry: The typical starting working dilution is 1:50. Functional assays (B cell activation).
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	This antibody reacts with Radioprotective 105 (RP105, CD180).
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch
Gene Name:	CD180 antigen
Database Link:	<a href="#">Entrez Gene 17079 Mouse</a> <a href="#">Q62192</a>



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**Background:**

Radioprotective 105 (RP105, CD180) is a type 1 transmembrane protein of 105 kDa with extracellular leucine-rich repeats (LLRs) and a short cytoplasmic tail. RP105, assigned as CD180, is similar to *Drosophila* Toll in the extracellular LLRs. Radioprotective 105 (RP105, CD180) expression is largely restricted to immune cells including CD19+ B cells and macrophages. Histological studies showed that RP105 is expressed mainly on mature B cells in mantle zones. Antibody-mediated (RP/14) cross-linking of RP105 induces resistance against irradiation-induced apoptosis, B-cell proliferation, and up-regulation of a costimulatory molecule B7.2, revealing RP105 as a potent regulator of B-cell activation. RP105 (CD180) has an important role in B-cell activation by LPS. It is important to note that RP105 associates with MD1, which is in this context important for RP105 with respect to B-cell surface expression and LPS recognition and signalling. MD-1 seems to be requisite for efficient expression of RP105.

**Synonyms:**

LY64