

Datasheet: MCA2149

Description:	RAT ANTI MOUSE CD180
Specificity:	CD180
Other names:	RP105
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RP/14
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			
Functional Assays (2)	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) CD180 is expressed at the cell surface in association with MD-1. CD180 may also be found free within the cell. For detection of intracellular CD180, membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

(2) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.

Target Species	Mouse
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
External Database Links	<p>UniProt: Q62192 Related reagents</p> <p>Entrez Gene: 17079 Cd180 Related reagents</p>
Synonyms	Ly78, Rp105
RRID	AB_2275518
Specificity	<p>Rat anti Mouse CD180 antibody, clone RP/14 recognizes mouse CD180, also known as Lymphocyte antigen 78 or Radioprotective 105 kDa protein encoded by the RP105 gene. Mouse CD180 is a 661 amino acid ~105 kDa single pass type 1 transmembrane glycoprotein, containing multiple leucine rich repeats within LRRCT and LRRNT domains. CD180 belongs to the toll-like receptor family and is primarily expressed in mature peripheral B cells and is thought to play a role in the innate immune response to bacterial lipopolysaccharide, through co-operation with MD-1 and TLR4 (UniProt: Q62192).</p> <p>Cross linking of CD180 with clone RP/14 has been reported to induce resistance against irradiation induced apoptosis, B-cell proliferation and up-regulation of a co-stimulatory molecule B7.2 (Miyake et al. 1998).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Nagai, Y. <i>et al.</i> (2002) Requirement for MD-1 in cell surface expression of RP105/CD180 and B-cell responsiveness to lipopolysaccharide. Blood. 99 (5): 1699-705. Miyake, K. <i>et al.</i> (1998) Mouse MD-1, a molecule that is physically associated with RP105 and positively regulates its expression. J Immunol. 161 (3): 1348-53. Geraldes, P. <i>et al.</i> (2007) Ig heavy chain promotes mature B cell survival in the absence of light chain. J Immunol. 179: 1659-68
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Guarantee	18 months from date of despatch.
Health And Safety	Material Safety Datasheet documentation #10040 available at:

Information 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@800
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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