

RAT anti-MOUSE CD45R (B220)

Publication No. L11254

MAN0003913

Store at 2° to 8°C

Catalog No.	Form	Amount	Excitation	Peak Emission	Matching Isotype Control
RM2600	Purified	200 µg	—	—	Rat IgG _{2a} Purified (Cat. no. R2a00)
RM2615	Biotin	1.0 mL	—	—	—
RM2626	Alexa Fluor® 405	1.0 mL	402 nm	421 nm	—
RM2628	Pacific Blue™	1.0 mL	405 nm	455 nm	—
RM2620	Alexa Fluor® 488	1.0 mL	488 nm	519 nm	—
RM2601	FITC	1.0 mL	488 nm	519 nm	Rat IgG _{2a} FITC (Cat. no. R2a01)
RM2601-3		3.0 mL			
RM2630	Pacific Orange™	1.0 mL	405 nm	551 nm	—
RM2630TR		0.25 mL			
RM2604	R-PE	0.5 mL	496 nm	578 nm	Rat IgG _{2a} R-PE (Cat. no. R2a04)
RM2604-3		3.0 mL			
RM2604-5		5.0 mL			
RM2617	PE-TR [†]	0.5 mL	488 nm	615 nm	Rat IgG _{2a} PE-TR (Cat. no. R2a17)
RM2622	PE-Alexa Fluor® 610	1.0 mL	488 nm	628 nm	—
RM2624	PE-Alexa Fluor® 700	1.0 mL	488 nm	723 nm	—
RM2605	APC	0.5 mL	650 nm	660 nm	Rat IgG _{2a} APC (Cat. no. R2a05)
RM2621	Alexa Fluor® 647	1.0 mL	650 nm	668 nm	Rat IgG _{2a} Alexa Fluor® 647 (Cat. no. R2a21)
RM2606	TC [‡]	0.5 mL	488 nm	670 nm	—
RM2618	PE-Cy®5.5	0.5 mL	488 nm	694 nm	—
RM2619	APC-Cy®5.5	0.5 mL	600–650 nm	694 nm	—
A14793	PerCP-Cy®5.5	0.125 mL [25 µg]	482 nm	695 nm	—
RM2629	Alexa Fluor® 700	1.0 mL	702 nm	723 nm	—
RM2627	APC-Alexa Fluor® 750	1.0 mL	650 nm	775 nm	—

[†] TR, Texas Red®

[‡] TC, TRI-COLOR®, PE-Cy®5.

Product Description

The Rat anti-Mouse CD45R (B220) Monoclonal Antibody (mAb) reacts with an exon A-specific epitope on CD45 that is expressed on virtually all B cells, and is maintained throughout B cell development^{1,2}. The epitope is expressed in a restricted manner by B cells, and is also present on lymphokine activated killer (LAK) cells¹. Although it has been widely used as a pan B cell marker, CD19 may be a more appropriate pan B cell marker, as expression of CD19 appears to be more closely restricted to B cells. The Rat anti-Mouse CD45R (B220) mAb has been shown to potentiate isotype switching in B cells and to inhibit proliferative responses to B cell mitogens^{3,4}.

Product Specifications

Clonality:	Monoclonal
Host/Class:	Rat IgG
Reactivity:	Mouse CD45R
Predicted Reactivity:	Mouse
Sequence Identity:	Mouse
Clone/PAD:	RA3-6B2
Isotype:	IgG _{2a}
Lot:	See product label

For research use only. Not for human or animal therapeutic or diagnostic use.

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Applications

Applications reported for the Rat anti-Mouse CD45R (B220) mAb include flow cytometry, immunostaining, and immunoprecipitation¹. In addition, the Rat anti-Mouse CD45R (B220)- PerCP-Cy[®]5.5 Monoclonal Antibody (Cat. no. A14793) has been shown to have reactivity against human CD45R (B220).

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage and Handling

Store reagents at 2° to 8°C. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Cells should be analyzed within 18 hours of staining for best results.

Avoid light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.

Storage Buffer

Phosphate Buffered Saline (PBS) with 0.1% sodium azide. Conjugated products are also formulated with BSA and may contain sucrose as an additional stabilizing agent. PerCP-Cy[®]5.5 conjugates contain an aqueous buffer with 0.09% sodium azide, and may contain carrier protein/stabilizer.

Caution: Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.

References

1. Coffman, R. L. 1982. Surface antigen expression and immunoglobulin gene rearrangement during mouse pre-B cell development. *Immunol. Rev.* 69: 5–23.
2. Johnson, P., A. Maiti, and D. H. W. Ng. 1997. CD45: A family of leukocyte-specific cells surface glycoproteins. In *Wier's Handbook of Experimental Immunology*, Vol. 2. L. A. Herzenberg, D. M. Weir, and C. Blackwell, eds. Blackwell Science, Cambridge, MA, pp.62.1–62.16.
3. George, A., S. Rath, K. E. Shroff, M. Wang, and J. M. Durdik. 1994. Ligation of CD45 on B cells can facilitate production of secondary Ig isotypes. *J. Immunol.* 152: 1014–1021.
4. Domiati-Saad, R., E. W. Ogle, and L. B. Justement. 1993. Administration of anti-CD45 mAb specific for a B cell-restricted epitope abrogates the B cell response to a T-dependent antigen *in vivo*. *J. Immunol.* 151: 5936–5947.














Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Related Products

Product Name	Quantity	Catalog no.
AbC™ Anti-Mouse Bead Kit	1 kit	A10344
AbC™ anti-Rat/Hamster Bead Kit	1 kit	A10389
Protein A Agarose	5 mL	15918-014
Recombinant Protein G (rProtein G) Agarose	5 mL	15920-010

Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

Limited Product Warranty

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