

## CD11b Rat Anti-Human/Mouse Monoclonal Antibody PE-Cy<sup>®</sup>5 Conjugate

Store at 2°C to 8°C

Pub. No. MAN0010685 Rev. 1.00

Catalog No.	Form	Amount	Excitation	Peak Emission
A26002	PE-Cy <sup>®</sup> 5	25 µg	488 nm	670 nm

### Product description

The CD11b Rat Anti-Human/Mouse Monoclonal Antibody (mAb) reacts with human and mouse CD11b. This 165-170 kDa cell surface glycoprotein is part of a family of integrin receptors that mediate adhesion between cells (cell-cell) and components of the extracellular matrix, e.g. fibrinogen (cell-matrix). In addition, integrins are active signaling receptors which recruit leukocytes to inflammatory sites and promote cell activation. Complete, functional integrin receptors consist of distinct combinations of integrin chains which are differentially expressed. CD11b assembles with Integrin beta-2 (CD18) into a receptor known as Macrophage Antigen-1 (Mac-1) or complement receptor type 3 (CR3). This receptor binds and induces intracellular signaling through ICAM-1 on endothelial cells and can also facilitate removal of iC3b bearing foreign cells. The M1/70 clone is widely used as a marker for CD11b expression on mouse macrophages, granulocytes, neutrophils, and NK cells.

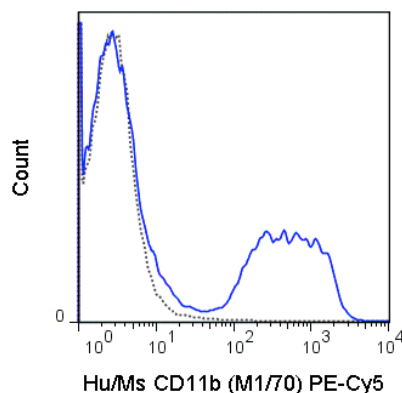
### Product Specifications

<b>Clonality:</b>	Monoclonal
<b>Host/Class:</b>	Rat IgG
<b>Reactivity:</b>	Human, Mouse CD11b
<b>Predicted Reactivity:</b>	Chimpanzee, Baboon, Cynomolgus, Rhesus
<b>Alternate Names:</b>	Mac-1, integrin $\alpha$ M, CR3, ITGAM
<b>Gene ID:</b>	16409 / 3684
<b>Sequence Identity:</b>	Mouse
<b>Clone/PAD:</b>	M1/70
<b>Isotype:</b>	IgG2bk
<b>Lot:</b>	See product label

### Product applications

The antibody has been used in flow cytometry,<sup>3</sup> functional assays,<sup>1,6,8</sup> immunofluorescence microscopy,<sup>2,4</sup> immunohistochemistry of paraffin embedded,<sup>5,9</sup> or frozen tissue,<sup>5,9</sup> and immunoprecipitation.<sup>10</sup> Other applications may work but have not been tested.

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



**Figure 1**

C57BL/6 bone marrow cells were stained with 0.125 µg of a CD11b Rat Anti-Human/Mouse Monoclonal Antibody PE-Cy<sup>®</sup>5 Conjugate (Cat. no. A26002) (solid line) or 0.125 µg PE-Cy<sup>®</sup>5 rat IgG2b isotype control (dashed line).

### Storage and handling

Store reagents at 2°C 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.

### Stability

When stored as instructed, expires six months from date of receipt unless otherwise indicated on the Certificate of Analysis.

### Storage buffer

10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.1% gelatin, pH7.2, and 0.09% sodium azide.



**CAUTION!** Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

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

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

## References

1. Lefort CT, Rossaint J, Moser M, Petrich BG, Zarbock A, Monkley SJ, Critchley DR, Ginsberg MH, Fassler R, and Ley K. 2012. *Blood*. 119:4275-4282.
2. Grewal JS, Pilgrim MJ, Grewal S, Kasman L, Werner P, Bruorton ME, London SD, and London L. 2011. *FASEB J*. 25:1680-1696.
3. Kim W-K, Sun Y, Do H, Autissier P, Halpern EF, Piatak M, Lifson JD, Burdo TH, McGrath MS, and Williams K. 2010. *J. Leukoc. Biol.* 87: 557-567.
4. Roland CL, Dineen SP, Lynn KD, Sullivan LA, Dellinger MT, Sadegh L, Sullivan JP, Shames DS, and Brekken RA. 2009. *Mol. Cancer Ther.* 8:1761-1771.
5. Sorg H, Lorch B, Jaster R, Fitzner B, Ibrahim S, Holzhueter S, Nizze H, and Vollmar B. 2008. *Am. J. Physiol. Gastrointest. Liver Physiol.* 295: G1274-1280.
6. Kim DD, Miwa T, Kimura Y, Schwendener RA, van Lookeren Campagne M, and Song W-C. 2008. *Blood*. 112:1109-1119.
7. Ou R, Zhang M, Huang L, Flavell RA, Koni PA, and Moskophidis D. 2008. *J. Virol.* 82:2952-2965.
8. Nutt SL, Metcalf D, D'Amico A, Polli M, and Wu L. 2005. *J. Exp. Med.* 201:221-231.
9. Whiteland JL, Nicholls SM, Shimeld C, Easty DL, Williams NA, and Hill TJ. 1995. *J. Histochem. Cytochem.* 43:313-320.
10. Miller LJ, Schwarting R, and Springer TA. 1986. *J. Immunol.* 137:2891-2900.

## Product documentation

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

## Important licensing information

This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

## Related products

Product Name	Quantity	Cat. No.
FIX & PERM® Reagents (200 tests)	1 kit	GAS004
LIVE/DEAD® Fixable Dead Cell Stain Kits		
Blue (UV excitation)	1 kit (200 assays)	L23105
Violet (405 nm excitation)		L34955
Aqua (405 nm excitation)		L34957
Yellow (405 nm excitation)		L34959
Green (488 nm excitation)		L23101
Red (488 nm excitation)		L23102
Far Red (633/635 nm excitation)		L10120
Near-IR (633/635 nm excitation)		L10119

## Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.lifetechnologies.com/termsandconditions](http://www.lifetechnologies.com/termsandconditions). If you have any questions, please contact Life Technologies at [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

## Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

**DISCLAIMER:** LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) DISCLAIM ALL WARRANTIES WITH RESPECT TO THIS DOCUMENT, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. TO THE EXTENT ALLOWED BY LAW, IN NO EVENT SHALL LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) BE LIABLE, WHETHER IN CONTRACT, TORT, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO THE USE THEREOF.

© 2014 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. Cy is a registered trademark of GE Healthcare UK, Ltd. FIX & PERM is a registered trademark of Nordic Immunological Laboratories BV.

For support visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support) or email [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

[www.lifetechnologies.com](http://www.lifetechnologies.com)

19 May 2014

**life**  
technologies™