

## Spark PLUS V450™ anti-mouse/human CD11b Antibody

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog# / Size</b>   | 101268 / 25 µg<br>101299 / 100 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Clone</b>             | M1/70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Other Names</b>       | αM integrin, Mac-1, Mo1, CR3, Ly-40, C3biR, ITGAM                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Isotype</b>           | Rat IgG2b, κ                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Description</b>       | CD11b is a 170 kD glycoprotein also known as αM integrin, Mac-1 α subunit, Mol, CR3, and Ly-40. CD11b is a member of the integrin family, primarily expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b non-covalently associates with CD18 (β2 integrin) to form Mac-1. Mac-1 plays an important role in cell-cell interaction by binding its ligands ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, and fibrinogen. |

### Product Details

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Verified Reactivity</b>    | Mouse, Human, Cynomolgus, Rhesus                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species</b>           | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen</b>              | C57BL/10 splenocytes                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with Spark PLUS V450™ under optimal conditions.                                                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>          | 0.2 mg/mL                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>                                                                                                                                                                                                                                                                                                   |
| <b>Application</b>            | <a href="#">FC - Quality tested</a>                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>* Spark PLUS V450™ has a maximum excitation of 405 nm and a maximum emission of 452 nm. |
| <b>Excitation Laser</b>       | Violet Laser (405 nm)                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Application Notes</b>      | Clone M1/70 has been verified for immunocytochemistry (ICC) and frozen immunohistochemistry (IHC-F).                                                                                                                                                                                                                                                                                                                                          |

Additional reported applications (for relevant formats of this clone) include: immunoprecipitation<sup>1,4</sup>, *in vitro* blocking<sup>3,9,12</sup>, depletion<sup>2,8</sup>, immunofluorescence microscopy<sup>6,7,10</sup>, immunohistochemistry of acetone-fixed frozen sections<sup>5,11-13</sup>, and spatial biology (IBEX)<sup>35,36</sup>. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 101248).

## Application References

(PubMed link indicates  
BioLegend citation)

1. Springer T, *et al.* 1978. *Eur. J. Immunol.* 8:539. (IP)
2. Ault K and Springer T. 1981. *J. Immunol.* 126:359. (Deplete)
3. Springer TA, *et al.* 1982. *Immunol. Rev.* 68:171. (Block)
4. Ho MK and Springer TA. 1983. *J. Biol. Chem.* 258:2766. (IP)
5. Flotte TJ, *et al.* 1983. *Am. J. Pathol.* 111:112. (IHC)
6. Noel GJ, *et al.* 1990. *J. Clin. Invest.* 85:208. (IF)
7. Allen LA and Aderem A. 1996. *J. Exp. Med.* 184:627 (IF)
8. D'Amico A and Wu L. 2003. *J. Exp. Med.* 198:293. (Deplete)
9. Brickson SJ, *et al.* 2003. *Appl Physiol.* 95:969. (Block)
10. Clatworthy MR and Smith KG. 2004. *J. Exp. Med.* 199:717. (IF)
11. Hata H, *et al.* 2004. *J. Clin. Invest.* 114:582. (IHC)
12. Zhang Y, *et al.* 2002. *J. Immunol.* 168:3088. (IHC)

[See More](#)

## Antigen Details

|                           |                                                                                                                                                                                                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Structure</b>          | Integrin family, associates with integrin $\beta_2$ (CD18), 170 kD                                                                                                                                                                                 |
| <b>Distribution</b>       | Granulocytes, monocytes/macrophages, dendritic cells, NK cells, subsets of T and B cells                                                                                                                                                           |
| <b>Function</b>           | Adhesion, chemotaxis                                                                                                                                                                                                                               |
| <b>Ligand/Receptor</b>    | ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, fibrinogen                                                                                                                                                                                    |
| <b>Cell Type</b>          | B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils, NK cells, T cells, Tregs                                                                                                                                              |
| <b>Biology Area</b>       | Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers                                                                                                                         |
| <b>Molecular Family</b>   | Adhesion Molecules, CD Molecules                                                                                                                                                                                                                   |
| <b>Antigen References</b> | <ol style="list-style-type: none"><li>1. Barclay A, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press.</li><li>2. Springer TA. 1994. <i>Cell</i> 76:301.</li><li>3. Coxon A, <i>et al.</i> 1996. <i>Immunity</i> 5:653.</li></ol> |
| <b>Gene ID</b>            | <a href="#">16409</a><br><a href="#">3684</a>                                                                                                                                                                                                      |

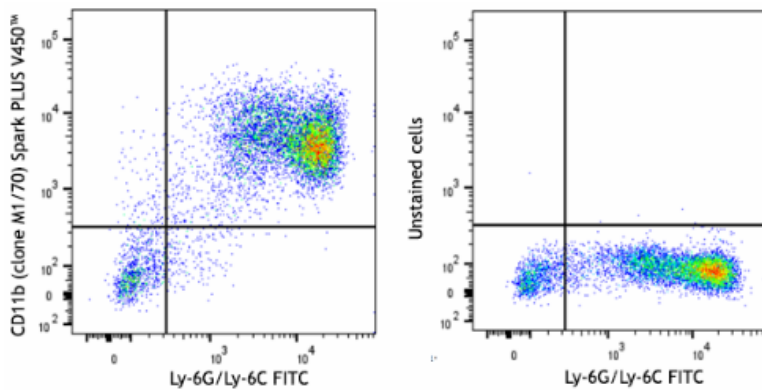
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Spark YG™ 593 anti-mouse/human CD11b, Spark YG™ 570 anti-mouse/human CD11b, PE/Fire™ 810 anti-mouse/human CD11b, Spark Blue™ 550 anti-mouse/human CD11b, APC/Fire™ 810 anti-mouse/human CD11b Antibody, Spark UV™ 387 anti-mouse/human CD11b, PerCP/Fire™ 806 anti-mouse/human CD11b, PerCP/Fire™ 780 anti-mouse/human CD11b, Spark Blue™ 574 anti-mouse/human CD11b (Flexi-Fluor™), KIRAVIA Blue 520™ anti-mouse/human CD11b, PE/Fire™ 744 anti-mouse/human CD11b, APC/Fire™ 750 anti-mouse/human CD11b, Brilliant Violet 785™ anti-mouse/human CD11b, Ultra-LEAF™ Purified anti-mouse/human CD11b, Brilliant Violet 570™ anti-mouse/human CD11b, Alexa Fluor® 594 anti-mouse/human CD11b, Spark PLUS UV395™ anti-mouse/human CD11b, Spark Red™ 718 anti-mouse/human CD11b (Flexi-Fluor™), Spark YG™ 581 anti-mouse/human CD11b (Flexi-Fluor™), StarBright UltraViolet 740 anti-mouse/human CD11b, StarBright UltraViolet 575 anti-mouse/human CD11b, Spark PLUS V475™ anti-mouse/human CD11b, Spark PLUS YG581™ anti-mouse/human CD11b, Alexa Fluor® 700 anti-mouse/human CD11b, APC anti-mouse/human CD11b, PE/Cyanine5 anti-mouse/human CD11b, Purified anti-mouse/human CD11b, Pacific Blue™ anti-mouse/human CD11b, TotalSeq™-A0014 anti-mouse/human CD11b, Brilliant Violet 750™ anti-mouse/human CD11b, TotalSeq™-B0014 anti-mouse/human CD11b, TotalSeq™-C0014 anti-mouse/human CD11b, PE/Cyanine7 anti-mouse/human CD11b, Spark NIR™ 685 anti-mouse/human CD11b, Purified anti-mouse/human CD11b (Maxpar® Ready), Alexa Fluor® 647 anti-mouse/human CD11b, Spark PLUS V450™ anti-mouse/human CD11b, PE anti-mouse/human CD11b, PerCP/Cyanine5.5 anti-mouse/human CD11b, PE/Fire™ 640 anti-mouse/human CD11b, Brilliant Violet 421™ anti-mouse/human CD11b, Brilliant Violet 605™ anti-mouse/human CD11b, Brilliant Violet 650™ anti-mouse/human CD11b, Brilliant Violet 711™ anti-mouse/human CD11b, Brilliant Violet 510™ anti-mouse/human CD11b, PE/Dazzle™ 594 anti-mouse/human CD11b, Spark PLUS B550™ anti-mouse/human CD11b, Alexa Fluor® 488 anti-mouse/human CD11b, Biotin anti-mouse/human CD11b, FITC anti-mouse/human CD11b, APC/Cyanine7 anti-mouse/human CD11b, PerCP anti-mouse/human CD11b

## Product Data



C57BL/6 mouse bone marrow cells were stained with anti-mouse Ly-6G/Ly-6C (clone Gr-1) FITC and anti-mouse/human CD11b (clone M1/70) Spark PLUS V450™ (left) or stained with anti-mouse Ly-6G/Ly-6C (clone Gr-1) FITC only (right). Data shown are gated on the myeloid population.

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