



## CELL LAB Rat Anti-Mouse CD11b/Mac-1

<u>Cat. No.</u>	<u>Form</u>	<u>Quantity</u>
732044	Purified (UNLB) Antibody	0.5 mg
732045	Fluorescein (FITC) Conjugate	0.5 mg
732046	Fluorescein (FITC) Conjugate	0.1 mg
732047	Biotin (BIOT) Conjugate	0.5 mg
732048	Phycoerythrin (PE) Conjugate	0.1 mg
733270	Phycoerythrin (PE) Conjugate	0.2 mg
732049	Allophycocyanin (APC) Conjugate	0.1 mg
732050	Spectral Red™ (SPRD) Conjugate	0.1 mg
733271	Cyanine 5 (Cy™5) Conjugate	0.1 mg
733272	Phycoerythrin-Cyanine 7 (PE-Cy™7) Conjugate	0.1 mg

### For Laboratory Use Only

#### DESCRIPTION

<b>Clone:</b>	M1/70
<b>Isotype:</b>	Rat (DA) IgG2b $\kappa$
<b>Immunogen:</b>	C57BL/10 mouse splenic T cells and concanavalin A-activated C57BL/10 splenocytes <sup>1</sup>
<b>Specificity:</b>	$\alpha$ M subunit (Mr 170 kDa) of the CD11b/CD18 heterodimer

CD11b (integrin  $\alpha$ M subunit) combines with CD18 (integrin  $\beta$ 2 subunit) to form the integrin Mac-1, also known as complement receptor 3 (CR3), which mediates adhesion to C3bi and ICAM-1 (CD54).<sup>2,3</sup> Mac-1 is expressed at varying levels on granulocytes, macrophages, dendritic cells, NK cells, and B-1 cells in the peritoneal and pleural cavities.<sup>2-8</sup> Mac-1 expression is rapidly up-regulated on neutrophils after activation and in the same time period that CD62L is shed from the cell surface. Monoclonal antibody M1/70 has been observed to cross-react with CD11b on human monocytes, polymorphonuclear leukocytes, and NK cells.<sup>8</sup> In addition to its role in binding C3bi on opsonized targets and mediation of the subsequent ingestion process,<sup>4,9</sup> Mac-1 is important as an adhesion molecule in the transendothelial migration of monocytes and neutrophils.<sup>10</sup>

#### APPLICATIONS

- Flow cytometry<sup>1</sup>
- *In vitro* blocking<sup>3,5</sup>
- Immunohistochemistry (acetone-fixed, frozen tissue sections)<sup>11</sup>
- Immunoprecipitation<sup>1,2,5</sup>

#### CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

#### WORKING DILUTIONS

<b>Flow Cytometry:</b>	Purified antibody	$\leq 1 \mu\text{g}/10^6$ cells
	FITC conjugate	$\leq 1 \mu\text{g}/10^6$ cells

BIOT conjugate	≤1 µg/10 <sup>6</sup> cells
PE conjugate	≤0.3 µg/10 <sup>6</sup> cells
APC conjugate	≤0.3 µg/10 <sup>6</sup> cells
SPRD conjugate	≤0.3 µg/10 <sup>6</sup> cells
PE-Cy5.5 conjugate	≤0.3 µg/10 <sup>6</sup> cells
Cy5 conjugate	≤0.3 µg/10 <sup>6</sup> cells

**Other Applications:** Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

## HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- The fluorescein (FITC) conjugates are supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub>.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>.
- The phycoerythrin (PE) conjugates are supplied as 0.1 mg in 1.0 mL and 0.2 mg in 2.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- The Spectral Red (SPRD) and phycoerythrin-Cyanine 7 (PE-Cy7), conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- The Cyanine 5 (Cy5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub>.
- Protect fluorochrome-conjugated forms from light. Do not freeze.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

## STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.
9. Contains sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, immediately wash excessively with water.

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## REFERENCES

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