



## CELL LAB Rat Anti-Mouse CD18/Integrin $\beta$ 2 Chain

| Cat. No. | Form                         | Quantity |
|----------|------------------------------|----------|
| 732052   | Purified (UNLB) Antibody     | 0.5 mg   |
| 732053   | Fluorescein (FITC) Conjugate | 0.5 mg   |
| 732054   | Biotin (BIOT) Conjugate      | 0.5 mg   |
| 732055   | Phycoerythrin (PE) Conjugate | 0.1 mg   |

### For Laboratory Use Only

#### DESCRIPTION

|                     |   |
|---------------------|---|
| <b>Clone:</b>       | C71/16  |
| <b>Isotype:</b>     | Rat (Lewis) IgG2 $\alpha$ k   |
| <b>Immunogen:</b>   | Cell membrane lysates derived from mouse T cell lymphoma BW5147 <sup>1</sup>  |
| <b>Specificity:</b> | Common $\beta$ <sub>2</sub> subunit (Mr 95 kDa) of the LFA-1 integrin complex |

CD18 represents the common  $\beta$ <sub>2</sub> integrin subunit that associates non-covalently with the  $\alpha$   $\beta$  chains of CD11a/LFA-1a, CD11b/Mac-1, and CD11c to form various integrin heterodimers. It is expressed strongly on lymphocytes and monocytes, and weakly on granulocytes, CD18 mediates a variety of heterotypic and homotypic intercellular adhesion reactions, and it regulates the ligand-binding activities of the various CD11/CD18 complexes. Monoclonal antibody C71/16 has not been reported to inhibit cell adhesion.<sup>1-4</sup>

#### APPLICATIONS

- Identification and enumeration of CD18<sup>+</sup> cells by flow cytometry<sup>1</sup>
- Immunohistochemistry (paraffin and acetone fixed frozen sections)<sup>1</sup>
- Immunoprecipitation<sup>1</sup>
- Western blotting<sup>1</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> | FITC conjugate | $\leq 1 \mu\text{g}/10^6$ cells   |
|                        | BIOT conjugate | $\leq 1 \mu\text{g}/10^6$ cells   |
|                        | PE conjugate   | $\leq 0.2 \mu\text{g}/10^6$ 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) conjugate is supplied as 0.5 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) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- 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.

### TRADEMARKS

The Beckman Coulter logo is a trademark of Beckman Coulter, Inc.

For additional information or if damaged product is received, contact your local Beckman Coulter Representative.

### REFERENCES

1. Trowbridge IS and Omary MB. 1981. Molecular complexity of leukocyte surface glycoproteins related to the macrophage differentiation antigen Mac-1. *J Exp Med*, 154:1517-1524.
2. Mazzone A and Ricevuti G. 1995. Leukocyte CD11/CD18 integrins: biological and clinical relevance. *Haematologica*, 80:161-175.
3. Lub M, Van KY and Figdor CG. 1995. Ins and outs of LFA-1. *Immunol Today*, 16:479-483.
4. Springer T, Galfre G, Secher DS and Milstein C. 1978. Monoclonal xenogeneic antibodies to murine cell surface antigens: identification of novel leukocyte differentiation antigens. *Eur J Immunol*, 8:539-551.



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