

**iFluor™ 647 Anti-human CD11a Antibody**  
**\*R7-1\***Catalog number: 101140F0, 101140F1  
Unit size: 100 tests, 500 tests**Product Details**

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze.                         |
| Expiration Date    | 12 months upon receiving                                                    |
| Concentration      | 0.1 mg/mL                                                                   |
| Formulation        | Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA |

**Antibody Properties**

|                    |                                            |
|--------------------|--------------------------------------------|
| Species Reactivity | Human                                      |
| Class              | Primary                                    |
| Clonality          | Monoclonal                                 |
| Host               | Mouse                                      |
| Isotype            | Mouse igg1                                 |
| Immunogen          | CD11a (LFA-1A, Integrin $\alpha$ L, ITGAL) |
| Clone              | R7-1                                       |
| Conjugate          | iFluor™ 647                                |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Blue liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 647 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 647 |
| Excitation Wavelength | 656 nm      |
| Emission Wavelength   | 670 nm      |

**Applications**

R7-1 is an anti-human monoclonal antibody that forms an immune complex with the CD11a antigen. CD11a (alternatively called  $\alpha$ L Integrin or Integrin  $\alpha$ -L) is a 170 - 180 kD transmembrane glycoprotein that is found on the surface of cells like T cells, NK cells, macrophages, granulocytes and B cells. CD11a has been closely linked to critical biological processes like cell-cell adhesion, particularly leukocyte cell-cell

adhesion. In addition, it is involved with key cellular pathways, in particular, the integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like ICAM-1, 2, 3 and 4 and CD18. CD11a is a fairly uncommon antibody target, with a little more than 3700 publications in the last decade. Even still, CD11a is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell adhesion and immunology. This antibody was purified through affinity chromatography and conjugated to iFluor™ 647 (ex/em = 656/670 nm). It is compatible with the 640 nm laser and 670/30 nm bandpass filter (for example, as in the BD Special Order LSRFortessa™ Cell Analyzer).