

**iFluor™ 647 Anti-human CD18 Antibody**  
**\*HI18a\***Catalog number: 101800F0, 101800F1  
Unit size: 100 tests, 500 tests**Product Details**

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|--------------------|---|
| 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**

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|--------------------|------------------------|
| Species Reactivity | Human                  |
| Class              | Primary                |
| Clonality          | Monoclonal             |
| Host               | Mouse                  |
| Isotype            | Mouse IgG1             |
| Immunogen          | CD18 (Integrin beta-2) |
| Clone              | HI18a                  |
| Conjugate          | iFluor™ 647            |

**Biological Properties**

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|-------------|--|
| 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**

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

**Applications**

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HI18a is an anti-human monoclonal antibody that targets the CD18 antigen. CD18 (sometimes called Integrin beta-2, ITGB2 or beta 2) is a transmembrane glycoprotein that is found on the surface of cells like granulocytes, platelets, macrophages, dendritic cells and B cells. In many organisms, CD18 is an enhancer of neuron death, suppresses dopamine metabolic process and is a promoter of nitric oxide biosynthetic

process. Additionally, it is involved with critical cellular pathways, for example, the integrin-mediated signaling pathway, cytokine-mediated signaling pathway and toll-like receptor 4 signaling pathway. CD18 has been associated with critical biological processes such as cell migration, particularly endothelial cell migration, and is associated with a variety of biologically interesting macromolecules/ligands, for example, CD11a, b and c. CD18 is a fairly uncommon antibody target, with a little more than 8300 publications in the last decade. Even still, CD18 is essential for signal transduction research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 647 (ex/em = 656/670 nm). It is compatible with the 642 nm laser and 664/20 nm bandpass filter (for example, as in the Luminex Guava easyCyte).