

**XFD488 Anti-human CD18 Antibody *HI18a,
XFD488 Same Structure to Alexa Fluor™
488***Catalog number: 10180150, 10180151
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 | AF488 |

Biological Properties

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|-------------|--|
| Appearance | Red liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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| Conjugate | AF488 |
| Excitation Wavelength | 499 nm |
| Emission Wavelength | 520 nm |

Applications

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 XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 488 nm laser and 530/30 nm bandpass filter (for example, as in the BD FACSAria™ Fusion).