

**XFD555 Anti-human CD18 Antibody \*HI18a,  
XFD555 Same Structure to Alexa Fluor™  
555\***Catalog number: 10180160, 10180161  
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	CD18 (Integrin beta-2)
Clone	HI18a
Conjugate	AF555

**Biological Properties**

---

Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF555 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

---

Conjugate	AF555
Excitation Wavelength	553 nm
Emission Wavelength	568 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 XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 555 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 561 nm laser and 585/29 nm bandpass filter (for example, as in the BD FACSJazz™).