

PE/XFD610 Anti-human CD18 Antibody *HI18a*

Catalog Number: 101801O0,
101801O1, 101801O2
Unit Size: 25 tests, 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	Lot specific (please consult certificate of analysis for given lot)
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	PE/AF610

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined.
	<i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

Spectral Properties

Conjugate	PE/AF610
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Excitation Wavelength 565 nm

Emission Wavelength 627 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 PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 615/20 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant VYB).