

PE/XFD700 Anti-human CD11a Antibody *HI111*

Catalog Number: 101101P0,
101101P1, 101101P2
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	CD11a (LFA-1A, Integrin α L, ITGAL)
Clone	HI111
Conjugate	PE/AF700

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 μ L/million cells in 100 μ L 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/AF700
-----------	----------

Excitation Wavelength 565 nm

Emission Wavelength 721 nm

Applications

HI111 is an anti-human monoclonal antibody that forms an immune complex with the CD11a antigen. CD11a (also known as Integrin alpha-L or LFA-1 α chain) is a 170 - 180 kD transmembrane protein that is expressed on the surface of cells such as granulocytes and macrophages. CD11a has been associated with critical biological processes like cell-cell adhesion, especially leukocyte cell-cell adhesion. Moreover, it is a member of essential cellular pathways, for instance, the integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as CD18 and ICAM-1, 2, 3 and 4. CD11a is a fairly uncommon antibody target, with a little more than 3700 publications in the last decade. Even still, CD11a has a variety of applications in neuroscience and innate immunity 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/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 720/60 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).