

## PE/XFD700 Anti-human CD11a Antibody \*R7-1\*

Catalog Number: 101141Q0,  
101141Q1, 101141Q2  
Unit Size: 25 tests, 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	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

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD11a (LFA-1A, Integrin αL, ITGAL)
Clone	R7-1
Conjugate	PE/AF700

### Biological Properties

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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 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 user titrates the product for use in their tests using proper positive and negative controls.</i>

### Spectral Properties

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Conjugate	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 nm

## Applications

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R7-1 is an anti-human monoclonal antibody that forms an immune complex with the CD11a antigen. CD11a (alternatively called  $\alpha$ L Integrin or Integrin alpha-L) is a 170 - 180 kD transmembrane glycoprotein that is found on the surface of cells like T cells, NK cells, macrophages, granulocytes and B cells. CD11a has been closely linked to critical biological processes like cell-cell adhesion, particularly leukocyte cell-cell adhesion. In addition, it is involved with key cellular pathways, in particular, the integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like ICAM-1, 2, 3 and 4 and CD18. CD11a is a fairly uncommon antibody target, with a little more than 3700 publications in the last decade. Even still, CD11a is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of cell adhesion and immunology. 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 695/40 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte).