

PE/XFD700 Anti-human CD11b Antibody *ICRF44*

Catalog Number: 101121P0,
101121P1, 101121P2
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, κ
Immunogen	CD11b (CR3, Mac-1, Mo1, ITGAM, Integrin alpha-M)
Clone	ICRF44
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 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/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 nm

Applications

ICRF44 is an anti-human monoclonal antibody that forms an immune complex with the CD11b antigen. CD11b (also known as Mo1 or Mac-1) is a 165 - 170 kD transmembrane glycoprotein that is expressed on the surface of cells such as dendritic cells, macrophages, NK cells and T cells. In some organisms, CD11b is involved in the positive regulation of neuron death, is a promoter of hippocampal neuron apoptotic process and is a positive regulator of protein targeting to membrane. Furthermore, it has been thought to be involved with vital biological processes such as cell adhesion, specifically cell-cell adhesion via plasma-membrane adhesion molecules. CD11b is a member of vital cellular pathways, for example, the integrin-mediated signaling pathway, apoptotic signaling pathway and toll-like receptor 4 signaling pathway. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands like iC3b, ICAM-1, Factor X and 2. CD11b is a very popular antibody target, with over 45000 publications in the last decade. CD11b is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of innate immunity 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 710/50 nm bandpass filter (for example, as in the BD LSRFortessa™ X-20).