

## XFD350 Anti-human CD11b Antibody \*ICRF44\*

Catalog Number: 10112140, 10112141

Unit Size: 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, $\kappa$
Immunogen	CD11b (CR3, Mac-1, Mo1, ITGAM, Integrin alpha-M)
Clone	ICRF44
Conjugate	AF350

### Biological Properties

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Appearance	Off-white liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF350 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 $\mu$ L/million cells in 100 $\mu$ 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

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Conjugate	AF350
Excitation Wavelength	343 nm
Emission Wavelength	441 nm

## Applications

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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 XFD350 (ex/em = 343/441 nm). XFD350 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 350 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 355 nm laser and 447/60 nm bandpass filter (for example, as in the Bio-Rad ZE5 Cell Analyzer).