

## XFD350 Anti-human CD11a Antibody \*R7-1, XFD350 Same Structure to Alexa Fluor™ 350\*

Catalog number: 10114140, 10114141 Unit size: 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 0.1 mg/mL

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 aL, ITGAL)

Clone R7-1

Conjugate AF350

**Biological Properties** 

Appearance Yellow liquid

Preparation Antibody purified by affinity chromatography and then conjugated with AF350 under optimal

conditions

Application Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties** 

Conjugate AF350

Excitation Wavelength 343 nm

Emission Wavelength 441 nm

## **Applications**

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 XFD350 (ex/em = 343/441 nm). XFD350 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 350 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 355 nm laser and 450/50 nm bandpass filter (for example, as in the BD LSRFortessa™ Cell Analyzer).