

XFD488 Anti-human CD11a Antibody *TS-1/22.1.1.13*

Catalog Number: 10115150, 10115151

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	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	TS-1/22.1.1.13
Conjugate	AF488

Biological Properties

Appearance	Orange liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
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	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

TS-1/22.1.1.13 is an anti-human monoclonal antibody that targets the CD11a antigen. CD11a (also known as ITGAL or LFA-1 α chain) is a 170 - 180 kD transmembrane glycoprotein that is found on the surface of cells such as NK cells, T cells, macrophages and B cells. CD11a plays a role in vital cellular pathways, namely, the integrin-mediated signaling pathway. Also, it has been closely linked to key biological processes like cell-cell adhesion, especially leukocyte cell-cell adhesion. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like ICAM-1 and CD18. CD11a is a fairly uncommon antibody target, with a little more than 3000 publications in the last decade. Even still, CD11a is frequently used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of costimulatory molecules, neuroinflammation and innate immunity. This antibody was purified through affinity chromatography and conjugated to XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 488 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant VYB).