XFD700 Anti-human CD11a Antibody *TS-1/22.1.1.13*

Catalog Number: 101151A0, 101151A1
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 aL, ITGAL)
Clone	TS-1/22.1.1.13
Conjugate	AF700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
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. *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.*

Spectral Properties

Conjugate   AF700

Excitation Wavelength   696 nm

Emission Wavelength   719 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-1α 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 XFD700 (ex/em = 696/719 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).