

## XFD680 Anti-human CD11a Antibody \*HI111\*

Catalog Number: 10110190, 10110191

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
Immunogen	CD11a (LFA-1A, Integrin αL, ITGAL)
Clone	HI111
Conjugate	AF680

### Biological Properties

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Appearance	Blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF680 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.
	<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 AF680

Excitation Wavelength 681 nm

Emission Wavelength 704 nm

## **Applications**

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HI111 is an anti-human monoclonal antibody that forms an immune complex with the CD11a antigen. CD11a (also known as Integrin alpha-L or LFA-1 $\alpha$  chain) is a 170 - 180 kD transmembrane protein that is expressed on the surface of cells such as granulocytes and macrophages. CD11a has been associated with critical biological processes like cell-cell adhesion, especially leukocyte cell-cell adhesion. Moreover, it is a member of essential cellular pathways, for instance, the integrin-mediated signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as CD18 and ICAM-1, 2, 3 and 4. CD11a is a fairly uncommon antibody target, with a little more than 3700 publications in the last decade. Even still, CD11a has a variety of applications in neuroscience and innate immunity research, typically serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to XFD680 (ex/em = 681/704 nm). XFD680 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 680 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 642 nm laser and 702/85 nm bandpass filter (for example, as in the Luminex Amnis FlowSight).