

XFD680 Anti-human CD11b Antibody *HI11b*

Catalog Number: 10111190, 10111191

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 IgG2b
Immunogen	CD11b (CR3, Mac-1, Mo1, ITGAM, Integrin alpha-M)
Clone	HI11b
Conjugate	AF680

Biological Properties

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

Conjugate	AF680
Excitation Wavelength	681 nm
Emission Wavelength	704 nm

Applications

HI11b is an anti-human monoclonal antibody that recognizes the CD11b antigen. CD11b (sometimes referred to as Integrin α M chain, C3bIR, CR3A or CR3) is a 165 - 170 kD glycoprotein that is expressed on the surface of cells such as B cells, granulocytes, NK cells, macrophages and dendritic cells. CD11b is involved with important cellular pathways, in particular, the cytokine-mediated signaling pathway, toll-like receptor 4 signaling pathway and apoptotic signaling pathway. Additionally, in many organisms, it is a promoter of superoxide anion generation, positively regulates microglial cell mediated cytotoxicity and is a positive regulator of prostaglandin-E synthase activity. CD11b has been associated with critical biological processes like cell adhesion, specifically cell-cell adhesion via plasma-membrane adhesion molecules, and is associated with a variety of biologically interesting macromolecules/ligands, for example, Factor X, iC3b and ICAM-1. CD11b is a very popular antibody target, with over 45000 publications in the last decade. CD11b has been widely used in innate immunity, neuroscience cell markers and cell biology research, often 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 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).