

## PE/XFD610 Anti-human CD11b Antibody \*HI11b\*

Catalog Number: 101111O0,  
101111O1, 101111O2  
Unit Size: 25 tests, 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 IgG2b                                      |
| Immunogen          | CD11b (CR3, Mac-1, Mo1, ITGAM, Integrin alpha-M) |
| Clone              | HI11b                                            |
| Conjugate          | PE/AF610                                         |

### Biological Properties

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| Preparation           | Antibody purified by affinity chromatography and then conjugated with PE/AF610 under optimal conditions                                                                                                                                    |
| Application           | Flow Cytometry (FACS)                                                                                                                                                                                                                      |
| 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 | PE/AF610 |
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Excitation Wavelength 565 nm

Emission Wavelength 627 nm

## Applications

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HI11b is an anti-human monoclonal antibody that recognizes the CD11b antigen. CD11b (sometimes referred to as Integrin  $\alpha$ 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 PE/XFD610 (ex/em = 567/627 nm). XFD610 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 610 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 615/20 nm bandpass filter (for example, as in the Agilent Technologies NovoCytte Quanteon).