

Technical Data Sheet

Anti-Mouse/Human CD11b

Catalog Number: 201201, 201202

Size: 100 ug, 500 ug

Target Name: CD11b, ITGAM, integrin α M, CR3

Regulatory Status: RUO

Product Details

Clone: M1/70

Application: FC

Reactivity: Human, Mouse

Format: Purified

Isotype: Rat IgG2b

Antibody Type: Monoclonal

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Protein Concentration: 0.5 mg/mL

Storage and Handling: The antibody solution should be stored between 2°C and 8°C

Background Information

CD11b, also known as integrin α M or ITGAM, is a type I transmembrane glycoprotein with a molecular weight of approximately 170 kDa under reducing conditions (165 kDa non-reducing) and contains 19 potential N-glycosylation sites. CD11b associates with CD18 (integrin α 2) to form the heterodimeric integrin Mac-1 (CD11b/CD18), also referred to as α M β 2, CR3 (complement receptor 3), iC3b receptor, or Mo-1. The assembly of CD11b with CD18 is required for its surface expression and function. CD11b/CD18 is one of four integrins formed by pairing the β 2 chain (CD18) with different α chains (CD11a–d). Mac-1 plays an essential role in cell adhesion, migration, and phagocytosis by binding to ligands including ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, and fibrinogen. CD11b is highly expressed on NK cells, neutrophils, monocytes, macrophages, dendritic cells, and at lower levels on subsets of T and B lymphocytes. Through these interactions, CD11b/CD18 contributes to leukocyte trafficking, complement-mediated clearance, and modulation of innate and adaptive immune responses.