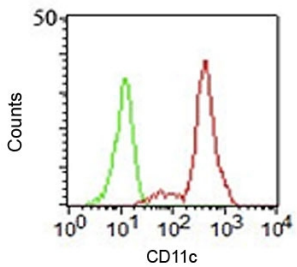
CD11c Antibody HC1/1 / p150/95 Antibody [clone HC1/1] (V2162)

Catalog No.	Formulation	Size
V2162-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2162-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2162SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (6)

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	HC1/1
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3687
Localization	Cell surface, cytoplasmic
Applications	Flow cytometry: 0.5-1ug/10^6 cells Immunofluorescence: 0.5-1ug/ml
Limitations	This CD11c Antibody HC1/1 / p150/95 Antibody is available for research use only.



CD11c Antibody HC1/1 in Human Peripheral Blood Mononuclear Cells FACS. Flow cytometry analysis of human peripheral blood mononuclear cells stained with CD11c antibody clone HC1/1. The histogram shows a distinct CD11c-positive population shifted to higher fluorescence relative to the negative population, demonstrating detection of cell-surface CD11c on a subset of human PBMCs. This validation complements the extensive published use of HC1/1 as an antibody against the historically designated p150/95 antigen.

Description

CD11c Antibody HC1/1 recognizes CD11c, a leukocyte integrin alpha chain encoded by the ITGAX gene. CD11c is also known as integrin alpha X and historically as the p150/95 alpha chain. It associates with CD18, or integrin beta 2, to form the alpha X beta 2 heterodimer commonly known as complement receptor 4 (CR4). This receptor belongs to the beta 2 integrin family and participates in leukocyte adhesion, migration, phagocytosis, and immune recognition.

CD11c is a type I transmembrane glycoprotein with a large extracellular region, a single transmembrane segment, and a short cytoplasmic tail. Its extracellular region contains an inserted I domain involved in ligand recognition. The CD11c/CD18 complex recognizes ligands including complement fragment iC3b and contributes to interactions with complement-opsonized material, extracellular matrix components, and cellular surfaces.

CD11c is strongly associated with dendritic cells and is also expressed by populations of monocytes, macrophages, granulocytes, natural killer cells, and some lymphocytes. Its expression is frequently examined in studies of antigen-presenting cells, innate immunity, inflammatory responses, myeloid differentiation, and hematologic malignancies. CD11c is particularly well established as an immunophenotypic marker associated with hairy cell leukemia.

Clone HC1/1 has a long history in CD11c research. The antibody was originally generated against phorbol ester-differentiated U937 cells, and early characterization identified its antigen as the p150/95 member of the CD11 family through cellular distribution, immunoprecipitation, and antibody competition experiments. Published studies using clone HC1/1 have also investigated CD11c/CD18 function. In one study, HC1/1 significantly inhibited concanavalin A-induced superoxide production in differentiated U937 cells, providing evidence for involvement of CD11c in respiratory burst signaling. These published findings describe historical experimental use of the HC1/1 clone and are distinct from the applications independently validated for this product.

A CD11c Antibody such as clone HC1/1 provides a historically characterized monoclonal reagent for investigating ITGAX and CD11c biology, while the term p150/95 Antibody reflects the original nomenclature under which this clone and its target were characterized.

For a monoclonal antibody with protein microarray specificity validation, see our CD11c Antibody ITGAX/1242 / Integrin Alpha X Antibody page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD11c Antibody HC1/1 / p150/95 Antibody to be titered up or down for optimal performance.

Immunogen

Human monocytic U937 phorbol ester-treated cells were used as the immunogen for this CD11c Antibody HC1/1.

Storage

Store the CD11c Antibody HC1/1 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

ITGAX antibody; Integrin Alpha X antibody; p150/95 antibody; Leukocyte Adhesion Glycoprotein p150/95 Alpha Chain antibody; Leu M5 antibody; CR4 Alpha Chain antibody

References (2)

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