TECHNICAL DATA SHEET

CD11c MAb

Catalog Number: CSB0227

DESCRIPTION

Target:	CD11c
Target aliases:	CD11c, CR4, complement receptor type 4 alpha chain, leukocyte adhesion glycoprotein p150,95 alpha chain
Fc isotype:	Mouse IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human, Pig, Marmoset (+/-)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag[1], disabled Fc-γ receptor binding[2]
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

CD11c TARGET INFORMATION

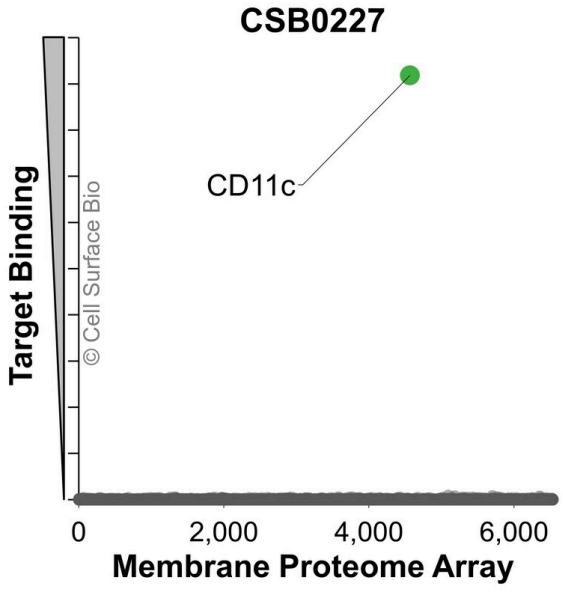
Integrin alpha X (ITGAX) is a type I transmembrane protein that belongs to the integrin alpha chain family and heterodimerizes with integrin beta 2 (ITGB2) to form the CD11c/CD18 complex, also known as complement receptor 4 (CR4). It is primarily expressed on dendritic cells, monocytes, macrophages, and certain activated lymphocytes, where it mediates cell adhesion, migration, and phagocytosis through interactions with ligands such as iC3b and intercellular adhesion molecules. The extracellular region contains an inserted (I) domain that facilitates ligand binding, while the cytoplasmic tail participates in intracellular signaling and cytoskeletal organization. ITGAX contributes to immune cell trafficking and antigen presentation processes. (NCBI Gene: 3687, UniProtKB/Swiss-Prot: P20702) Other names: CD11c, CR4, complement receptor type 4 alpha chain, leukocyte adhesion glycoprotein p150,95 alpha chain

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

Membrane Proteome Specificity



The specificity of CD11c Monoclonal Antibody (CSB0227) was tested on the Membrane Proteome Array™ and shown to be specific for human CD11c.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed Human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

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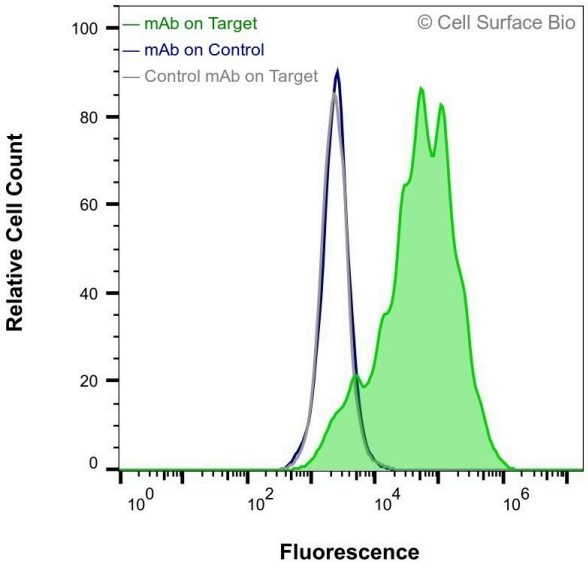
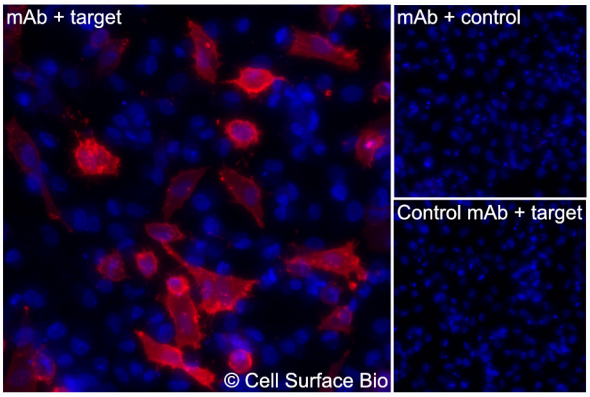
Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



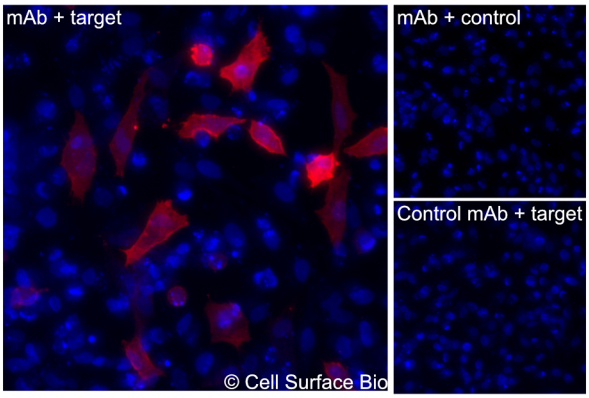
HEK-F cells transiently transfected with human CD11c were stained with CD11c Monoclonal Antibody (CSB0227) (green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-F cells transiently transfected with an empty control vector were also stained with CD11c Monoclonal Antibody (CSB0227) (blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(Left) JS-1 cells transiently transfected human CD11c were stained with CD11c Monoclonal Antibody (CSB0227) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with CD11c Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with human CD11c and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml



(Left) JS-1 cells transiently transfected human CD11c were permeabilized and stained with CD11c Monoclonal Antibody (CSB0227) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with CD11c Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with human {{target} and stained with control MAb.