

Purified Anti-Mouse CD11a Antibody[FD441.8]

catalog number: E-AB-F1033A

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

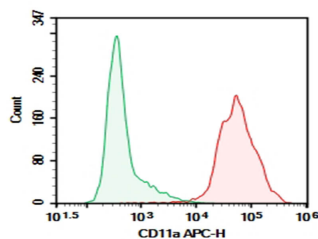
Reactivity	Mouse
Immunogen	Recombinant Mouse CD11a protein
Host	Rat
Isotype	Rat IgG2b, κ
Clone	FD441.8
Purification	>98%, Protein A/G purified
Buffer	Phosphate-buffered solution, pH 7.2, containing 0.05% non-protein stabilizer. Dialyze to completely remove the stabilizer prior to labeling.

Applications

Recommended Dilution

FCM	2 µg/mL(0.5×10 ⁶ -1×10 ⁶ cells)
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Data



C57/BL6 Mouse splenocytes were stained with 0.2 µg Purified Anti-Mouse CD11a Antibody[FD441.8](Right) and 0.2 µg Rat IgG2b, κ Isotype Control (Left), followed by APC-conjugated Goat Anti-Rat IgG Secondary Antibody.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	Ice bag

Background

CD11a (LFA-1 alpha, ITGAL) together with CD18 constitute leukocyte function-associated antigen 1 (LFA-1), the alphaLbeta2 integrin. CD11a is implicated in activation of LFA-1 complex. CD11a plays a central role in leukocyte intercellular adhesion through interactions with its ligands, ICAMs 1-3 (intercellular adhesion molecules 1 through 3), and also functions in lymphocyte costimulatory signaling. CD11a is expressed on the plasma membrane of leukocytes in a low-affinity conformation. Cell stimulation by chemokines or other signals leads to induction the high-affinity conformation, which supports tight binding of CD11a to its ligands, the intercellular adhesion molecules ICAM-1, -2, -3. CD11a is thus involved in interaction of various immune cells and in their tissue-specific settlement, but participates also in control of cell differentiation and proliferation and of T-cell effector functions. Blocking of CD11a function by specific antibodies or small molecules has become an important therapeutic approach in treatment of multiple inflammatory diseases. For example, humanized anti- CD11a antibody Efalizumab (Raptiva) is being used to interfere with T cell migration to sites of inflammation, binding of cholesterol-lowering drug simvastatin to CD11a allosteric site leads to immunomodulation and increase in lymphocytic cholinergic activity. Two transcript variants encoding different isoforms of CD11a have been found. Diseases associated with CD11a dysfunction include benign cephalic histiocytosis and leukocyte adhesion deficiency.

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