

#3563 Store at -20°C

CD4 (Edu-2) Mouse mAb

400 µl
 (100 Tests)



Orders ■ 877-616-CELL (2355)
 orders@cellsignaling.com
Support ■ 877-678-TECH (8324)
 info@cellsignaling.com
Web ■ www.cellsignaling.com

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This product is for *in vitro* research use only and is not intended for use in humans or animals.

Applications	Species Cross-Reactivity	Molecular Wt.	Source	Isotype
F	H	55 kDa	Mouse	IgG1

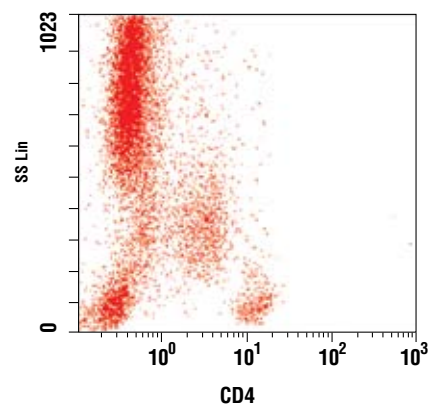
Background: Cluster of Differentiation 4 (CD4) is a glycoprotein composed of an amino-terminal extracellular domain (four domains: D1-D4 with Ig-like structures), a transmembrane part and a short cytoplasmic tail. CD4 is expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages and dendritic cells and plays an important role in the development and activation of T cells. On T cells, CD4 is the co-receptor for the T cell receptor (TCR), and these two distinct structures recognize the Antigen-Major Histocompatibility Complex (MHC). Specifically, the D1 domain of CD4 interacts with the β2-domain of the MHC class II molecule. CD4 ensures specificity of the TCR-antigen interaction, prolongs the contact between the T cell and the antigen presenting cell and recruits the tyrosine kinase Lck, which is essential for T cell activation (1).

Specificity/Sensitivity: CD4 (Edu-2) Mouse mAb detects endogenous levels of total CD4 protein.

Source/Purification: Monoclonal antibody is produced by immunizing BALB/c mice with stimulated human leukocytes.

Directions for Use: Incubate cells with 10% normal serum from same species as the secondary antibody for 10 minutes. Add the antibody at the recommended dilution and incubate for 30 minutes at room temperature. Wash with PBS and incubate with fluorochrome-conjugated secondary antibody for 30 minutes at room temperature. Wash with PBS and analyze on flow cytometer. Note: Not recommended for use with fixation/permeabilization protocols that contain methanol.

Background References:
 (1) Zamoyska, R. (1994) *Immunity* 1, 243-246.



Flow cytometric analysis of whole blood, using CD4 (Edu-2) Mouse mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Recommended Antibody Dilutions:
 Flow Cytometry 1:25

- Companion Products:**
 CD8 (RIV11) Mouse mAb #3572
 CD10 (CB-CALLA) Mouse mAb #3565
 CD13 (B-F10) Mouse mAb #3566
 CD14 (5A3B11B5) Mouse mAb #3573
 CD16 (FcγmIII) (CB-16) Mouse mAb #3567
 CD34 (IC0115) Mouse mAb #3569
 CD56 (NCAM) (123C3) Mouse mAb #3576
 CD3e (CD3-12) Rat mAb #4443