

Anti-CD4 Antibody (Monoclonal, CA-4)

Catalog # ABO10411

Product Information

Application	IHC-F
Primary Accession	P05540
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for CD4, CD4 molecule (CD4) detection. Tested with IHC-F in Human. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	24932
Other Names	T-cell surface glycoprotein CD4, T-cell surface antigen T4/Leu-3, W3/25 antigen, CD4, Cd4
Calculated MW	51438
Application Details	Immunohistochemistry(Frozen Section), 1 µg/ml, Human
Subcellular Localization	T-cell surface glycoprotein CD4
Tissue Specificity	51438 MW
Source	Eukaryota
Protein Name	Membrane; Single-pass type I membrane protein.
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.
Clone Names	CA-4
Immunogen	CD4-transfected mouse T-cell hybridoma, 3DT, followed by CD4+ human T-cell CEM cells.
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also

be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	Cd4
Function	Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T- helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages.
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:P01730}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:P01730} Note=Localizes to lipid rafts. {ECO:0000250 UniProtKB:P01730}

Background

CD stands for cluster of differentiation"; the number that follows is arbitrarily assigned. In the full designation the cell type and nature and molecular weight of the antigen are given in brackets; for CD4

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