

Anti-CD4 Antibody (Monoclonal, CA-4)
Catalog # ABO10411**Specification**

Anti-CD4 Antibody (Monoclonal, CA-4) - 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.

Anti-CD4 Antibody (Monoclonal, CA-4) - 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

|immunology|adaptive immunity|t cells|
stem cells|hematopoietic progenitors|lymphoid|t lymphocytic lineage|myeloid|dendritic cell lineage|monocytic lineage|
immunology|regulatory t cells|immune system diseases|antiviral signaling|hiv-related Da

Application Details

Immunohistochemistry(Frozen Section), 1 µg/ml, Human

Subcellular Localization

T-cell surface glycoprotein CD4

Tissue Specificity

51438 MW

Source

Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation.

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.

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.

Anti-CD4 Antibody (Monoclonal, CA-4) - 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}

Anti-CD4 Antibody (Monoclonal, CA-4) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD4 Antibody (Monoclonal, CA-4) - Images**Anti-CD4 Antibody (Monoclonal, CA-4) - 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