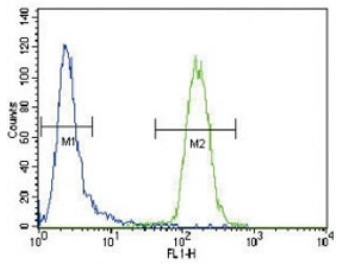
CD4 Antibody / Antigen Recognition Co-Receptor Antibody (F44339)

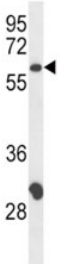
Catalog No.	Formulation	Size
F44339-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44339-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

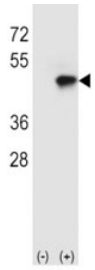
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P01730
Applications	Western Blot : 1:1000 Flow Cytometry : 1:10-1:50
Limitations	This CD4 Antibody / Antigen Recognition Co-Receptor Antibody is available for research use only.



CD4 Antibody for FACS. Analysis of CD4 antibody staining in human CEM cells by flow cytometry shows a distinct rightward shift in fluorescence intensity (right histogram) compared to negative control cells (left histogram), demonstrating specific detection of CD4-expressing T lymphoblast cells and highlighting antigen recognition-associated receptor expression on the cell surface. A FITC-conjugated goat anti-rabbit secondary antibody was used for detection, supporting clear discrimination of CD4-positive populations for flow cytometry-based analysis of co-receptor function.



CD4 Antibody for WB. Analysis of CD4 antibody in human CEM cell lysate by western blot shows a band detected at approximately 40-60 kDa, consistent with the predicted molecular weight of CD4, with variation reflecting glycosylation-dependent mobility of this membrane-associated co-receptor involved in antigen recognition.



Western blot analysis of CD4 antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CD4 gene (2).

Description

CD4 molecule (CD4) is a cell surface glycoprotein that functions as a co-receptor for antigen recognition by interacting with major histocompatibility complex class II molecules expressed on antigen-presenting cells. CD4 Antibody / Antigen Recognition Co-Receptor Antibody is used to detect CD4-positive cells and supports analysis of antigen recognition mechanisms that initiate adaptive immune responses.

CD4 antibody, also known as T helper cell marker antibody or CD4 surface receptor antibody, enables identification of lymphocytes that participate in antigen-specific immune recognition. CD4 binds to MHC class II molecules and stabilizes interactions between T cells and antigen-presenting cells, facilitating efficient engagement of the T cell receptor. This interaction enhances signal transduction and promotes activation of downstream immune pathways.

CD4 Antibody supports investigation of antigen recognition processes by enabling detection of CD4-positive T cells involved in immune surveillance and response to foreign antigens. These cells are essential for recognizing peptide antigens presented by professional antigen-presenting cells and for initiating immune responses that lead to pathogen clearance or immune memory formation.

CD4 also plays a role in organizing the immunological synapse, a specialized interface that coordinates signaling between T cells and antigen-presenting cells. This spatial organization ensures efficient communication and signal amplification during antigen recognition. CD4 Antibody targeting this receptor enables study of co-receptor function and supports detailed analysis of antigen-driven immune signaling events.

CD4 is localized to the plasma membrane and directly participates in MHC class II-dependent antigen recognition. A CD4 antibody can be used in research applications to support detection of CD4-expressing lymphocytes, enabling investigation of antigen recognition pathways and the initiation of adaptive immune responses.

A full range of CD4 antibody reagents for immunohistochemistry, western blot, and flow cytometry is available on our CD4 Antibody collection page.

Application Notes

Titration of the CD4 Antibody / Antigen Recognition Co-Receptor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 58-86 from the human protein was used as the immunogen for this CD4 antibody.

Storage

Aliquot the CD4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD4 co-receptor antibody, CD4 antigen recognition antibody, CD4 MHC class II interaction antibody, CD4 receptor

antibody