abcam

ab18280

APC Anti-CD4 antibody [MEM-241]

Anti-CD4 antibody [MEM-241] conjugated to APC - suitable for flow cytometry, and reacts with human samples. Clone [MEM-241] is a mouse monoclonal antibody cited in 8 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: BSA, PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human CD4. The exact immunogen used to generate this antibody is proprietary information. Database link P01730
Clone number	MEM-241
Purification technique	Affinity purification Protein A
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	1/20
Notes	ab37391 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information 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. (Microbial infection) Primary receptor for human immunodeficiency virus-1 (HIV-1) (PubMed:12089508, PubMed:16331979, PubMed:2214026, PubMed:9641677). Down-regulated by HIV-1 Vpu (PubMed:17346169). Acts as a receptor for Human Herpes virus 7/HHV-7 (PubMed:7909607).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

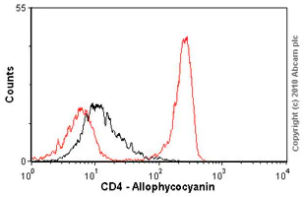
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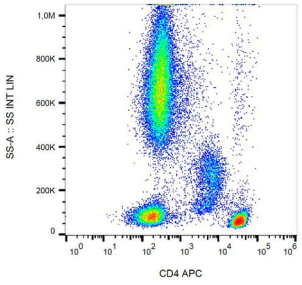
2 product images



Flow Cytometry - APC Anti-CD4 antibody [MEM-241] (ab18280)

CD4 Flow Cytometry staining using mouse Anti-CD4 antibody

Overlay histogram showing peripheral blood lymphocytes stained with ab18280 (red line). The cells were incubated with the antibody (ab18280, 1/20 dilution) for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) with secondary antibody DyLight® 649 goat anti-mouse IgG (H&L) (ab96882) at 1/200 dilution for 30 min at 4°C. Acquisition of >5,000 events was performed gating on peripheral blood lymphocytes.



Flow Cytometry - APC Anti-CD4 antibody [MEM-241] (ab18280)

CD4 Flow Cytometry staining using mouse Anti-CD4 antibody

Surface staining of human peripheral blood cells with anti-human CD4 (MEM-241) APC.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.