abcam

ab28069

Biotin Anti-CD4 antibody [MEM-241]

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

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	Biotin
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide
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	Size-exclusion chromatography
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purity >95% by SDS-PAGE.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1 µg/mL
Notes	ab18434 - 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 duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Avoid freeze / thaw cycle

Notes

The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.

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

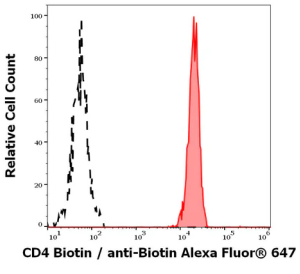
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

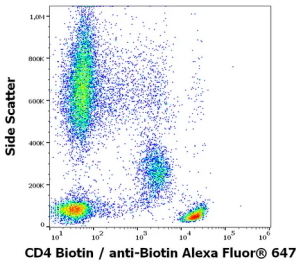
2 product images



Flow Cytometry - Biotin Anti-CD4 antibody [MEM-241] (ab28069)

CD4 Flow Cytometry staining of Human peripheral whole blood using mouse Anti-CD4 antibody

Separation of human CD4 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab28069 (concentration in sample 2 µg/ml) and secondary stained using anti-biotin (1D4-C5) Alexa Fluor® 647, concentration in sample 0.19 µg/ml).



Flow Cytometry - Biotin Anti-CD4 antibody [MEM-241] (ab28069)

CD4 Flow Cytometry staining of Human peripheral whole blood using mouse Anti-CD4 antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab28069 (concentration in sample 2 µg/ml) and secondary stained using anti-biotin (1D4-C5) Alexa Fluor® 647 (concentration in sample 0.19 µg/ml).

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