abcam

ab22268

PE Anti-CD3 antibody [KT3]

Anti-CD3 antibody [KT3] conjugated to PE - suitable for flow cytometry, and reacts with mouse samples. Clone [KT3] is a rat monoclonal antibody cited in 21 publications.

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

Lab Essentials

Key facts

Isotype	IgG2a
Host species	Rat
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: PBS, 5% Sucrose, 1% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	KT3
Purification technique	Affinity purification Protein A
Specificity	This antibody recognises the mouse CD3 antigen which is expressed by mature T cells.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	10 µL for 10^6 Cells
Notes	ab134674 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD3D

Function

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD247/CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:2470098). In addition of this role of signal transduction in T-cell activation, CD3D plays an essential role in thymocyte differentiation. Indeed, participates in correct intracellular TCR-CD3 complex assembly and surface expression. In absence of a functional TCR-CD3 complex, thymocytes are unable to differentiate properly. Interacts with CD4 and CD8 and thus serves to establish a functional link between the TCR and coreceptors CD4 and CD8, which is needed for activation and positive selection of CD4 or CD8 T-cells (PubMed:12215456).

Storage

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

Notes

Purified IgG conjugated to R. Phycoerythrin (RPE).

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.

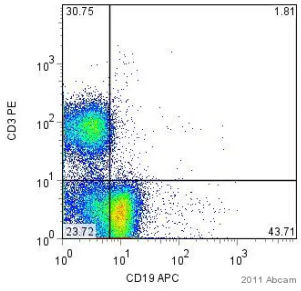
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

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3 product images



This image is courtesy of an anonymous customer review

Flow Cytometry - PE Anti-CD3 antibody [KT3] (ab22268)

CD3 Flow Cytometry staining using rat Anti-CD3 antibody

Flow cytometry analysis of human peripheral blood mononuclear cells (PBMC) labelling CD3 with ab22268 at a dilution of (1/100 in PBS + 0.5% BSA) for 1 hour at 4°C. Cell separation was achieved by FICOLL medium with PBS + 0.5% BSA.
Gating Strategy: Lymphocytes

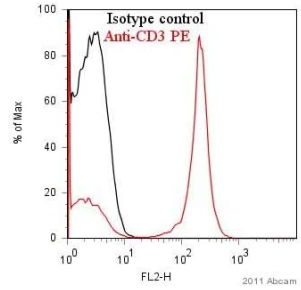


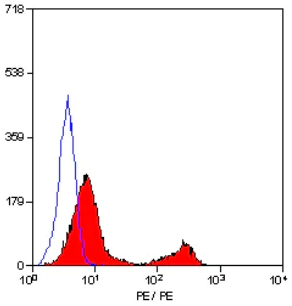
Image courtesy of an anonymous customer review.

Flow Cytometry - PE Anti-CD3 antibody [KT3] (ab22268)

ab22268 used in Flow Cytometry.

Canine blood leucocytes were harvested in PBS, 2% BSA, 0.01% sodium azide after red blood cell lysis, then fixed with paraformaldehyde. ab22268 used at a 1/100 dilution for 1 hour at 4°C.

The gating strategy used was for lymphocytes.



Flow Cytometry - PE Anti-CD3 antibody [KT3] (ab22268)

CD3 Flow Cytometry staining using rat Anti-CD3 antibody

ab22268 staining CD3 in mouse spleen cells by Flow Cytometry analysis.

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