abcam

ab34722

FITC Anti-CD3 antibody [CD3-12]

Anti-CD3 antibody [CD3-12] conjugated to FITC - suitable for flow cytometry, and reacts with mouse, human, chicken, dog, and other samples. Clone [CD3-12] is a rat monoclonal antibody cited in 52 publications.

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

Lab Essentials

Key facts

Isotype	IgG1
Host species	Rat
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human CD3E. The exact immunogen used to generate this antibody is proprietary information. Database link P07766
Clone number	CD3-12
Purification technique	Affinity purification Protein G
Specificity	ab34722 recognises a highly conserved epitope of the CD3 molecule expressed by T lymphocytes.
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Pig
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Chicken
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Monkey
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Rhesus monkey
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Human
Dilution info	1/5 - 1/10

Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Dog
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

Species	Horse
Dilution info	1/5 - 1/10
Notes	ab18404 - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody. Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Membrane permeabilisation is required for this application.

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 duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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.

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