# abcam

## Product datasheet

# FITC Anti-CD3 zeta (phospho Y83) antibody [EP776(2)Y] ab237453



### 1 References 3 Images

#### Overview

Product name FITC Anti-CD3 zeta (phospho Y83) antibody [EP776(2)Y]

**Description** FITC Rabbit monoclonal [EP776(2)Y] to CD3 zeta (phospho Y83)

Host species Rabbit

**Conjugation** FITC. Ex: 493nm, Em: 528nm

Tested applications Suitable for: Flow Cyt (Intra), ICC

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

**Positive control** ICC: Pervanadate treated Jurkat cells. Flow Cyt (intra): Pervanadate treated Jurkat cells.

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol, 1% BSA, PBS

Purity Protein A purified

1

ClonalityMonoclonalClone numberEP776(2)Y

**Isotype** IgG

#### **Applications**

**The Abpromise guarantee** Our <u>Abpromise guarantee</u> covers the use of ab237453 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.

#### **Target**

**Function** Probable role in assembly and expression of the TCR complex as well as signal transduction

upon antigen triggering.

**Involvement in disease** Defects in CD247 are the cause of immunodeficiency due to defect in CD3-zeta (CD3ZID)

[MIM:610163]. An immunological deficiency characterized by T-cells impaired immune response

to alloantigens, tetanus toxoid and mitogens.

**Sequence similarities** Belongs to the CD3Z/FCER1G family.

Contains 3 ITAM domains.

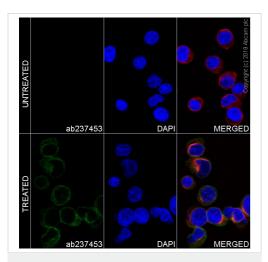
**Domain** The ITAM domains mediate interaction with SHB.

Post-translational modifications

 $\label{prop:lated} Phosphory lated on Tyr \ residues \ after \ T-cell \ receptor \ triggering.$ 

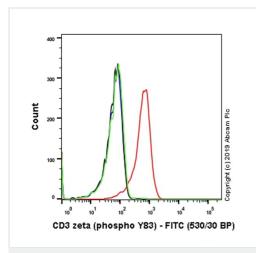
Cellular localization Membrane.

# Images



Immunocytochemistry - FITC Anti-CD3 zeta (phospho Y83) antibody [EP776(2)Y] (ab237453)

ab237453 staining CD3 zeta (phospho Y83) in Jurkat cells +/pervanadate (1mM, 30min). The cells were fixed with 4% paraformaldehyde, permeabilized with 0.1% Triton X-100, then incubated ab237453 at 1/50 dilution (shown in green). Counterstained with ab195889, anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594), (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

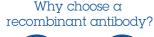


Flow Cytometry (Intracellular) - FITC Anti-CD3 zeta (phospho Y83) antibody [EP776(2)Y] (ab237453)

Flow cytometry overlay histogram showing Jurkat + pervanadate ( 1mM, 30min)(Red) / Untreated control (Green) stained with ab237453. The cells were fixed with 4 % formaldehyde (10 min). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab237453).

Isotype control antibody (Black) was Rabbit IgG, monoclonal [EPR25A] - Isotype Control (FITC) (ab223339) used at the same concentration and conditions as the primary antibody.

Unlabelled sample without incubation with primary antibody and secondary antibody (Blue) was also used as a control.





Consistent and reproducible results

Long-term and scalable supply Recombinant



Confirmed

specificity



Ethical standards compliant Animal-free production

FITC Anti-CD3 zeta (phospho Y83) antibody [EP776(2)Y] (ab237453)

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors