Overview

Product name: Anti-CD3 zeta (phospho Y142) antibody [EP265(2)Y]
Description: Rabbit monoclonal [EP265(2)Y] to CD3 zeta (phospho Y142)
Host species: Rabbit
Specificity: This antibody detects CD3 zeta phosphorylated on tyrosine 142.
Tested applications: Suitable for: WB, IP, ICC
Unsuitable for: Flow Cyt or IHC-P
Species reactivity: Reacts with: Human
Immunogen: A phospho specific peptide corresponding to residues surrounding tyrosine 142 of human CD3 zeta.
Positive control: Jurkat cell lysates
General notes: Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: pH: 7.40
Preservative: 0.05% Sodium azide
 Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity: Tissue culture supernatant
Clonality: Monoclonal
Clone number: EP265(2)Y
Isotype: IgG
Applications

Our Abpromise guarantee covers the use of ab68235 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>WB</td>
<td>1/500 - 1/2000. Detects a band of approximately 21 kDa (predicted molecular weight: 19 kDa).</td>
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<tr>
<td>IP</td>
<td>1/50.</td>
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<tr>
<td>ICC</td>
<td>1/250 - 1/500.</td>
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Application notes
Is unsuitable for Flow Cyt or IHC-P.

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
Phosphorylated on Tyr residues after T-cell receptor triggering.

Cellular localization
Membrane.

Images
All lanes: Anti-CD3 zeta (phospho Y142) antibody [EP265(2)Y] (ab68235) at 1/1000 dilution

Lane 1: Untreated Jurkat cells whole cell lysates

Lane 2: Jurkat cells were treated with 50mM Pervanadate for 5 minutes whole cell lysates

Lane 3: Jurkat cells were treated with 50mM Pervanadate for 5 minutes whole cell lysates. Then the membrane was incubated with Alkaline phosphatase.

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 19 kDa
Observed band size: 18 kDa

Exposure time: 3 minutes

Blocking buffer 5% NFDM/TBST
Diluting buffer 5% NFDM/TBST
All lanes: Anti-CD3 zeta (phospho Y142) antibody [EP265(2)Y] (ab68235) at 1/2000 dilution

Lane 1: Jurkat cell lysates, membrane untreated
Lane 2: Jurkat cell lysates, membrane treated with pervanadate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 19 kDa
Observed band size: 19 kDa

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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- We investigate all quality concerns to ensure our products perform to the highest standards

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