

## Product datasheet

### Anti-CD3 epsilon antibody [EPR20752] ab215212

Recombinant RabMAb

[4 References](#) [6 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-CD3 epsilon antibody [EPR20752]  |
| <b>Description</b>         | Rabbit monoclonal [EPR20752] to CD3 epsilon   |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P, WB, IHC-Fr, IP  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse   |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.   |
| <b>Positive control</b>    | WB: Mouse thymus and lymph node lysate; EL4.IL-2 whole cell lysate. IHC-P: Mouse spleen and thymus tissue. IHC-fr: Mouse spleen tissue. IP: EL4.IL-2 whole cell lysate.   |
| <b>General notes</b>       | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> |

#### Properties

|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | 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. |
| <b>Storage buffer</b>       | <p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>    |
| <b>Purity</b>               | Protein A purified  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | EPR20752  |
| <b>Isotype</b>              | IgG   |

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab215212 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   |
|-------------|-----------|---|
| IHC-P       |           | 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Perform heat mediated antigen retrieval using <b>ab93684</b> (Tris/EDTA buffer, pH 9.0). |
| WB          |           | 1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).  |
| IHC-Fr      |           | 1/800.<br>Perform heat mediated antigen retrieval by using sodium citrate buffer (10 mM citrate pH 6.0 + 0.05% Tween-20)  |
| IP          |           | 1/30.   |

## Target

### Function

The CD3 complex mediates signal transduction.

### Sequence similarities

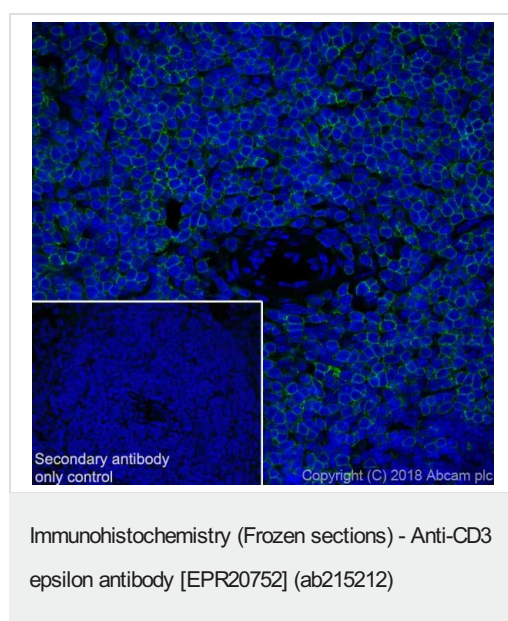
Contains 1 Ig-like (immunoglobulin-like) domain.

Contains 1 ITAM domain.

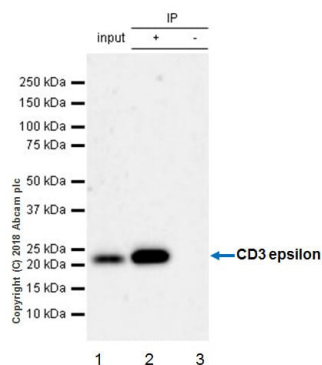
### Cellular localization

Membrane.

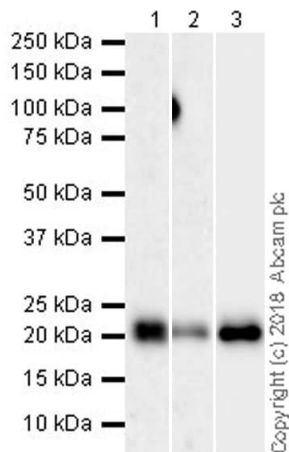
## Images



Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilised mouse spleen tissue labelling CD3 epsilon with ab215212 at 1/800 dilution, followed by AlexaFluor®488 Goat anti-Rabbit secondary (**ab150077**) at 1/1000 dilution. Positive membrane staining on cells localized in the periaarterial lymphatic sheath in mouse spleen tissue section is observed (PMID: 20880086) Counterstained with DAPI. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is AlexaFluor®488 Goat anti-Rabbit secondary (**ab150077**) at 1/1000 dilution.



Immunoprecipitation - Anti-CD3 epsilon antibody  
[EPR20752] (ab215212)



Western blot - Anti-CD3 epsilon antibody  
[EPR20752] (ab215212)

CD3 epsilon was immunoprecipitated from 10 µg of EL4.IL-2 (Mouse lymphoma T lymphocyte) whole cell lysate with ab215212 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab215212 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/5000 dilution

**Lane 1:** EL4.IL-2 (Mouse lymphoma T lymphocyte) whole cell lysate 10 µg (input).

**Lane 2:** ab215212 IP in EL4.IL-2 whole cell lysate (+)

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab215212 in EL4.IL-2 whole cell lysate (-).

Blocking and dilution buffer and concentration: 5% NFDM/TBST

Exposure time: 3 minutes

**All lanes :** Anti-CD3 epsilon antibody [EPR20752] (ab215212) at 1/1000 dilution

**Lanes 1-2 :** Mouse lymph node

**Lane 3 :** EL4.IL-2 (mouse lymphoma T lymphocyte), whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

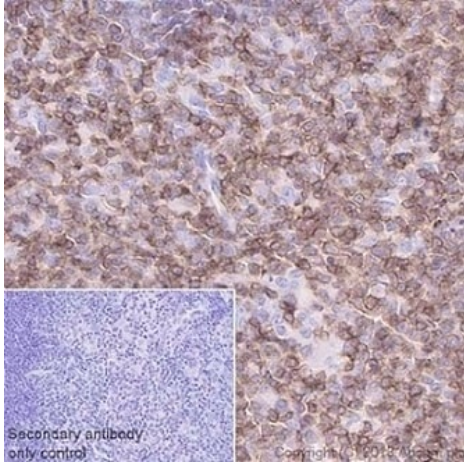
**Predicted band size:** 21 kDa

**Observed band size:** 21 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: Lanes 1-2: 3 minutes

Lane 3: 15 seconds

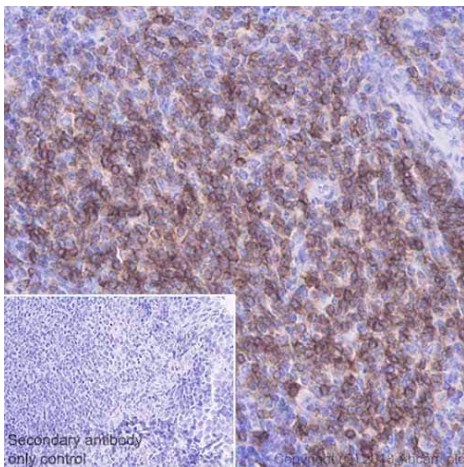


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [EPR20752] (ab215212)

Immunohistochemical analysis of Paraffin-embedded sections mouse thymus tissue labeling CD3 epsilon with ab215212 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Mainly membranous staining on T cells in mouse thymus is observed (PMID: 18648532). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [EPR20752] (ab215212)

Immunohistochemical analysis of Paraffin-embedded sections mouse spleen tissue labeling CD3 epsilon with ab215212 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Mainly membranous staining on T cells in mouse spleen is observed (PMID: 18648532). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CD3 epsilon antibody [EPR20752] (ab215212)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### 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 <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

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