


## Product datasheet

# Anti-CD3 antibody [SP162] ab135372

Recombinant RabMAb

★★★★★ 1 Abreviews 2 References 7 Images

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-CD3 antibody [SP162]   |
| <b>Description</b>         | Rabbit monoclonal [SP162] to CD3  |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> ICC/IF, IHC-P, Flow Cyt, WB  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Human<br><b>Predicted to work with:</b> Rat, Rabbit, Chicken, Cow, Dog, Pig  |
| <b>Immunogen</b>           | Synthetic peptide within Human CD3 aa 150 to the C-terminus (internal sequence). The exact sequence is proprietary.<br>Database link: <a href="#">P07766</a>                                |
| <b>Positive control</b>    | IHC-P: Human tonsil tissue. Flow Cyt: Jurkat and Mouse Splenocyte cells WB: Jurkat whole cell lysate ( <a href="#">ab7899</a> ). ICC/IF: Jurkat and EL4.IL-2 cells                          |
| <b>General notes</b>       | <b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b>  |

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](#).

### Properties

|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Store at +4°C. Do Not Freeze.                           |
| <b>Storage buffer</b>       | pH: 7.6<br>Preservative: 0.1% Sodium azide<br>Constituents: PBS, 1% BSA |

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>Purity</b>             | Immunogen affinity purified       |
| <b>Purification notes</b> | Purified from TCS by protein A/G. |
| <b>Clonality</b>          | Monoclonal                        |
| <b>Clone number</b>       | SP162                             |
| <b>Isotype</b>            | IgG                               |

## Applications

Our [Abpromise guarantee](#) covers the use of **ab135372** in the following tested applications.

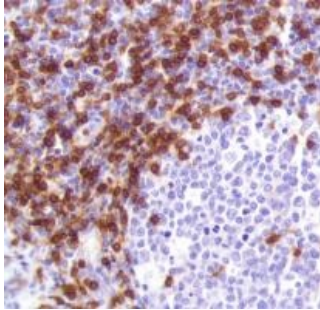
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| ICC/IF      |           | 1/10.  |
| IHC-P       | ★★★★★     | 1/150. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Incubate with primary antibody for 10 minutes at room temperature. |
| Flow Cyt    |           | 1/150 - 1/200.<br><a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.  |
| WB          |           | 1/150. Predicted molecular weight: 19 kDa. Incubate for 1 hour at room temperature.  |

## Target

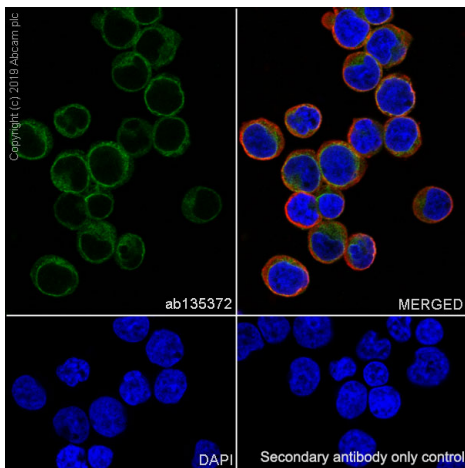
|                               |  |
|-------------------------------|--|
| <b>Function</b>               | The CD3 complex mediates signal transduction.  |
| <b>Involvement in disease</b> | Defects in CD3D are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (T(-)/B(+)/NK(+)) SCID [MIM:608971]. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development. |
| <b>Sequence similarities</b>  | Contains 1 ITAM domain.  |
| <b>Cellular localization</b>  | Membrane.  |

## Images



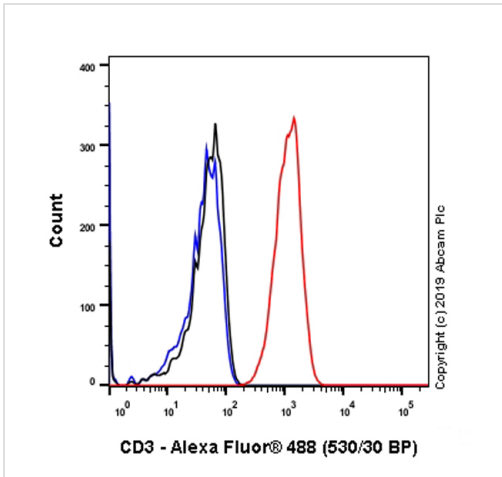
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 antibody [SP162] (ab135372)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human tonsil tissue labeling CD3 with ab135372 at a 1/150 dilution.



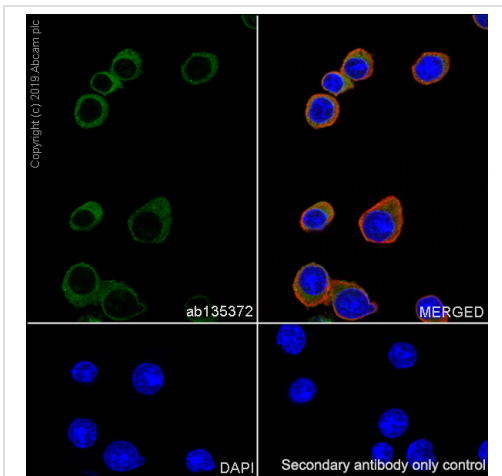
Immunocytochemistry/ Immunofluorescence - Anti-CD3 antibody [SP162] (ab135372)

Immunocytochemistry/ Immunofluorescence analysis of Jurkat (human T cell leukemia T lymphocyte) cells labeling CD3 with purified ab135372 at 1/10 (10 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



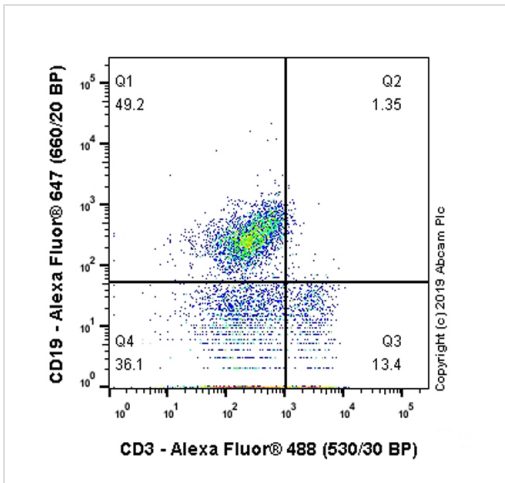
Flow Cytometry - Anti-CD3 antibody [SP162]  
(ab135372)

Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling CD3 with purified ab135372 at 1/200 dilution (0.60 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.



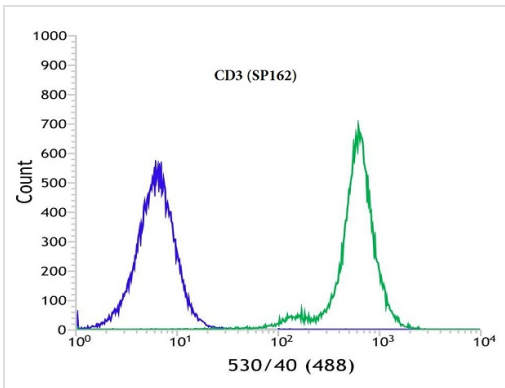
Immunocytochemistry/ Immunofluorescence - Anti-CD3 antibody [SP162] (ab135372)

Immunocytochemistry/ Immunofluorescence analysis of EL4.IL-2 (mouse lymphoma T lymphocyte) cells labeling CD3 with purified ab135372 at 1/10 (10 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



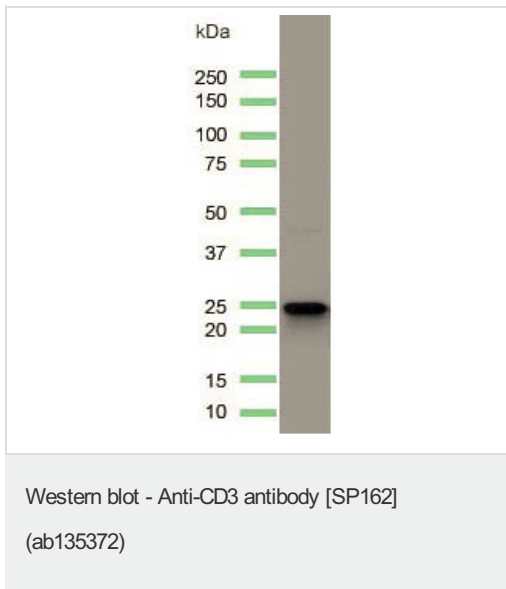
Flow Cytometry - Anti-CD3 antibody [SP162]  
(ab135372)

Flow Cytometry analysis of Mouse Splenocyte cells labeling CD3 with purified ab135372 at 1/20 dilution (5.95 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150081) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.



Flow Cytometry - Anti-CD3 antibody [SP162]  
(ab135372)

Flow cytometric analysis of rabbit anti-CD3 (SP162) antibody ab135372 (1/150) in Jurkat (Human T cell leukemia cell line from peripheral blood) cells (green) compared to negative control of rabbit IgG (blue).



Anti-CD3 antibody [SP162] (ab135372) at 1/150 dilution + Jurkat  
(Human T cell leukemia cell line from peripheral blood) cell lysate

**Predicted band size:** 19 kDa

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

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