

## Product datasheet

# Anti-CD8 alpha antibody [CAL67] - BSA and Azide free ab251597

Recombinant RabMAb

[5 Images](#)

### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-CD8 alpha antibody [CAL67] - BSA and Azide free  |
| <b>Description</b>         | Rabbit monoclonal [CAL67] to CD8 alpha - BSA and Azide free   |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P, WB, IP, ICC/IF<br><b>Unsuitable for:</b> Flow Cyt   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.   |
| <b>Positive control</b>    | IHC-P: Human tonsil and colon tissue. ICC/IF: Human PBMCs. IP: IP in human thymus lysate.   |
| <b>General notes</b>       | <p>ab251597 is the carrier-free version of <a href="#">ab237710</a>.</p> <p>Our <a href="#">carrier-free</a> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <a href="#">conjugation kits</a> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> |

### 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: 7.2<br>Constituent: PBS                   |

|                           |                             |
|---------------------------|-----------------------------|
| <b>Carrier free</b>       | Yes                         |
| <b>Purity</b>             | Protein A purified          |
| <b>Purification notes</b> | Purity is greater than 99%. |
| <b>Clonality</b>          | Monoclonal                  |
| <b>Clone number</b>       | CAL67                       |
| <b>Isotype</b>            | IgG                         |

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab251597 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

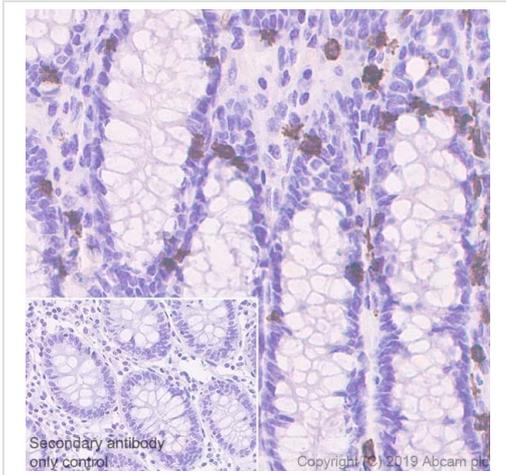
| Application   | Abreviews | Notes   |
|---------------|-----------|---|
| <b>IHC-P</b>  |           | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| <b>WB</b>     |           | Use at an assay dependent concentration. Predicted molecular weight: 26 kDa.  |
| <b>IP</b>     |           | Use at an assay dependent concentration.  |
| <b>ICC/IF</b> |           | Use at an assay dependent concentration.  |

**Application notes** Is unsuitable for Flow Cyt.

## Target

|   |  |
|---|--|
| <b>Function</b>                         | Identifies cytotoxic/suppressor T-cells that interact with MHC class I bearing targets. CD8 is thought to play a role in the process of T-cell mediated killing. CD8 alpha chains binds to class I MHC molecules alpha-3 domains.                  |
| <b>Involvement in disease</b>           | Defects in CD8A are a cause of familial CD8 deficiency (CD8 deficiency) [MIM:608957]. Familial CD8 deficiency is a novel autosomal recessive immunologic defect characterized by absence of CD8+ cells, leading to recurrent bacterial infections. |
| <b>Sequence similarities</b>            | Contains 1 Ig-like V-type (immunoglobulin-like) domain.  |
| <b>Post-translational modifications</b> | All of the five most carboxyl-terminal cysteines form inter-chain disulfide bonds in dimers and higher multimers, while the four N-terminal cysteines do not.  |
| <b>Cellular localization</b>            | Secreted and Cell membrane.  |

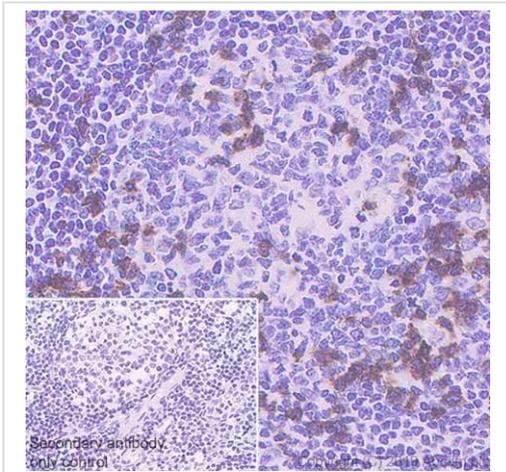
## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [CAL67] - BSA and Azide free (ab251597)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling CD8 alpha with [ab237710](#) at 1/1500 dilution (0.352 µg/ml), followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the T lymphocytes in the human colon is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

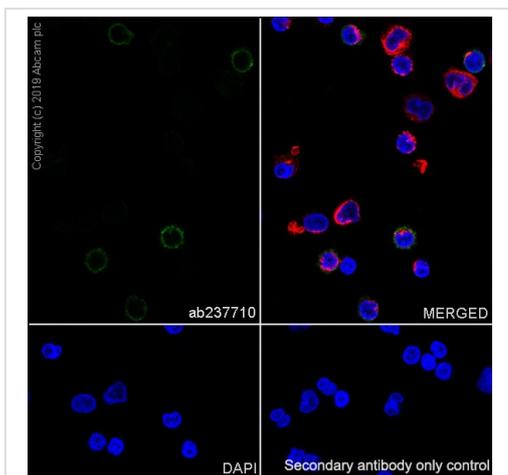
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide ([ab237710](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [CAL67] - BSA and Azide free (ab251597)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD8 alpha with [ab237710](#) at 1/1500 dilution (0.352 µg/ml), followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on human tonsil tissue is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

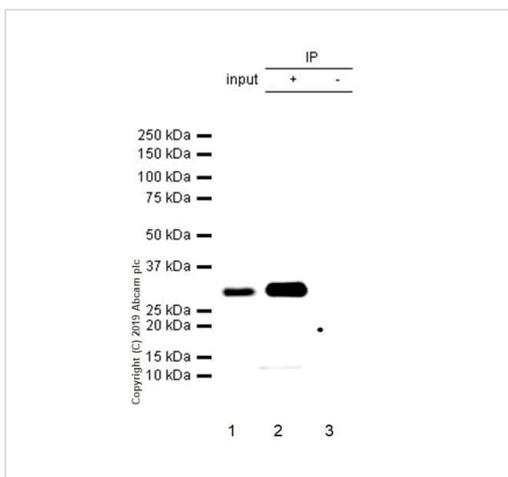
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide ([ab237710](#)).



Immunocytochemistry/ Immunofluorescence - Anti-CD8 alpha antibody [CAL67] - BSA and Azide free (ab251597)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized human PBMC (human primary peripheral blood mononuclear cell) cells labeling CD8 alpha with [ab237710](#) at 1/100 dilution (5.3µg), followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in subsets of human PBMC. The nuclear counter stain is DAPI (blue). Counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at a 1/200 dilution (red). The negative control is the secondary antibody only.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide ([ab237710](#)).



Immunoprecipitation - Anti-CD8 alpha antibody [CAL67] - BSA and Azide free (ab251597)

CD8 alpha was immunoprecipitated from 0.35 mg human thymus lysate with [ab237710](#) at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed from the immunoprecipitate using [ab237710](#) at 1/1000 (0.53µg/ml) dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used at 1/5000 dilution.

**Lane 1:** Human thymus lysate 10 µg (Input).

**Lane 2:** [ab237710](#) IP in human thymus lysate.

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of [ab237710](#) in human thymus lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 10 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide ([ab237710](#)).

### 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-CD8 alpha antibody [CAL67] - BSA and Azide free (ab251597)

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

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