

Product datasheet

Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free ab251607

Recombinant RabMAb

10 Images

Overview

Product name	Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free
Description	Rabbit monoclonal [CAL57] to CD3 epsilon - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-Fr, IP, IHC-P, Flow Cyt (Intra) Unsuitable for: ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Mouse CD3 epsilon aa 135-189. The exact sequence is proprietary. Database link: P22646
Positive control	IHC-P: Mouse and rat spleen tissue. Human tonsil and colon tissue. WB: EL4.IL-2 and Jurkat whole cell lysate. Mouse lymph node lysate. Rat thymus and spleen lysate. IHC-Fr: Mouse thymus tissue. Flow Cyt (intra): Human peripheral blood mononuclear cells. Mouse splenocytes. IP: EL4.IL-2 whole cell lysate.
General notes	<p>ab251607 is the carrier-free version of ab237721.</p> <p>Our carrier-free 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 conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <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[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p>

Properties

Form	Liquid
------	--------

Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Purification notes	Purity is greater than 99%.
Clonality	Monoclonal
Clone number	CAL57
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251607 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

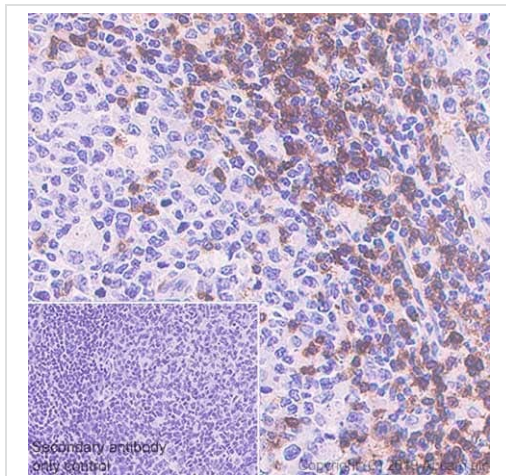
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 23 kDa.
IHC-Fr		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.

Application notes Is unsuitable for ICC/IF.

Target

Function	The CD3 complex mediates signal transduction.
Sequence similarities	Contains 1 Ig-like (immunoglobulin-like) domain. Contains 1 ITAM domain.
Cellular localization	Membrane.

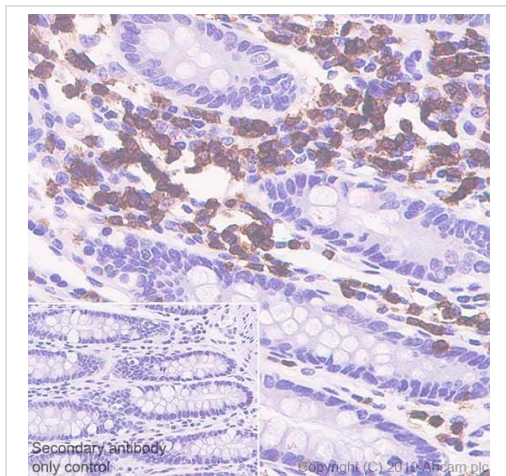
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CD3 epsilon with **ab237721** at 1/2000 dilution, followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on the T lymphocytes in the human tonsil. The section was incubated with **ab237721** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

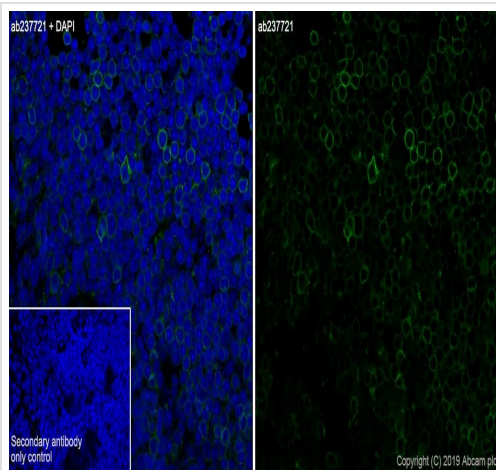
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling CD3 epsilon with **ab237721** at 1/2000 dilution, followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on the T lymphocytes in the human colon. The section was incubated with **ab237721** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

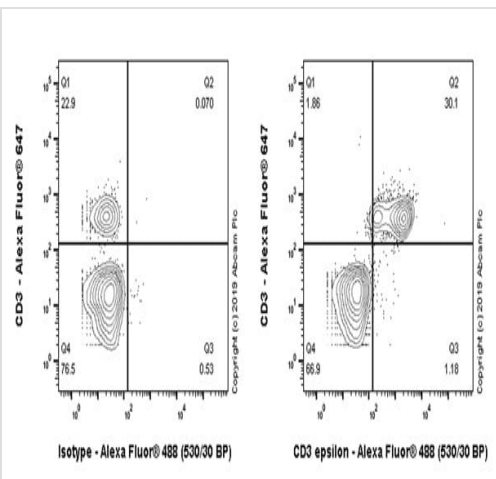
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunohistochemistry (Frozen sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen mouse thymus tissue labeling CD3 epsilon with **ab237721** at 1/500 dilution (green), followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at a 1/1,000 dilution. Positive staining on T cell surface (PMID: 8490660) is observed. Counterstained with DAPI (blue). Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit used at a 1/1,000 dilution. Heat mediated antigen retrieval using sodium citrate buffer (10 mM citrate pH 6.0 and 0.05% Tween-20).

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).

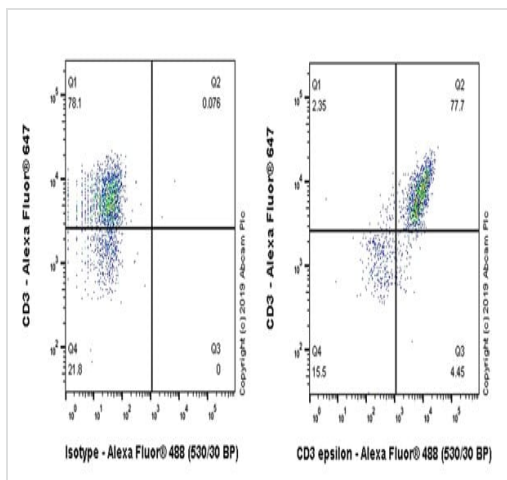


Flow Cytometry (Intracellular) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed, 0.1% Tween-20 permeabilized mouse splenocytes labeling CD3 epsilon with **ab237721** at 1/500 (right panel) compared with a Rabbit monoclonal IgG (**ab172730**) (left panel). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody.

Cells were surface stained with anti-CD3 conjugated to Alexa Fluor® 647. Then fixed with 2% PFA for 10min and intracellularly stained with rabbit IgG (Left) or **ab237721** (Right). They recognize the same cell population.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).

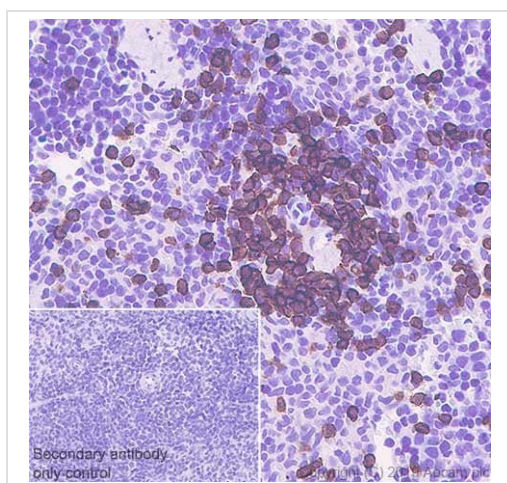


Flow Cytometry (Intracellular) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed, 0.1% Tween-20 permeabilized human peripheral blood mononuclear cell (PBMC) labeling CD3 epsilon with **ab237721** at 1/500 (right panel) compared with a Rabbit monoclonal IgG (**ab172730**) (left panel). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150097**), at 1/5000 dilution was used as the secondary antibody.

Cells were surface stained with anti-CD3 conjugated to Alexa Fluor® 647. Then fixed with 2% PFA for 10min and intracellularly stained with rabbit IgG (Left) or **ab237721** (Right). They recognize the same cell population.

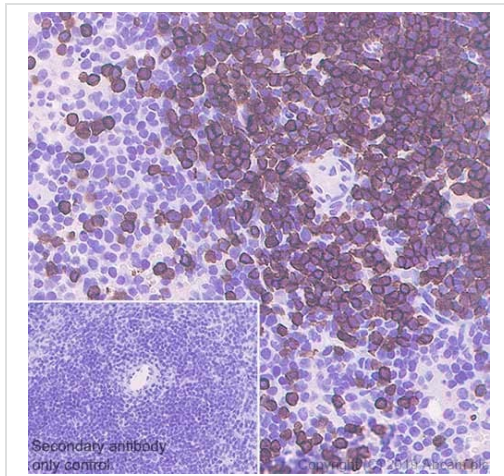
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling CD3 epsilon with **ab237721** at 1/2000 dilution, followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on the T lymphocytes in the rat spleen. The section was incubated with **ab237721** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

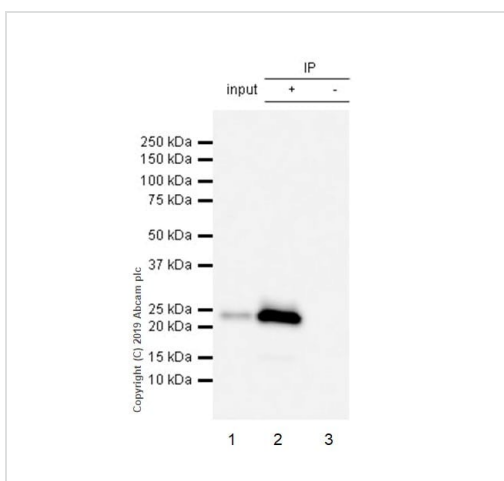
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling CD3 epsilon with **ab237721** at 1/2000 dilution, followed by ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on the T lymphocytes in the mouse spleen. The section was incubated with **ab237721** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunoprecipitation - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

CD3 epsilon was immunoprecipitated from 0.35 mg EL4.IL2 (Mouse lymphoma T lymphocyte) whole cell lysate with **ab237721** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab237721** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used at 1/5000 dilution.

Lane 1: EL4.IL2 whole cell lysate 10 µg (Input).

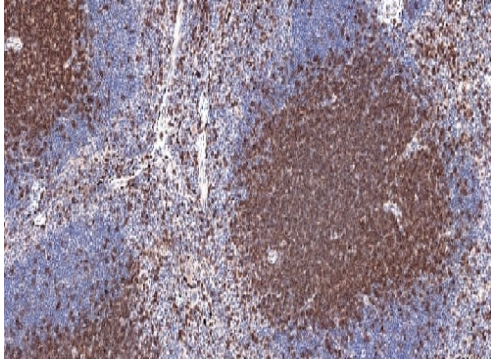
Lane 2: **ab237721** IP in EL4.IL2 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab237721** in EL4.IL2 whole cell lysate.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

Formalin-fixed, paraffin-embedded mouse spleen tissue stained for CD3 epsilon using **ab237721** at 0.5 µg/ml in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237721**).

Why choose a recombinant antibody?



Anti-CD3 epsilon antibody [CAL57] - BSA and Azide free (ab251607)

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