

Product datasheet

Anti-CD8 alpha antibody [CAL67] ab237710

Recombinant RabMAb

[7 Images](#)

Overview

Product name	Anti-CD8 alpha antibody [CAL67]
Description	Rabbit monoclonal [CAL67] to CD8 alpha
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IP, IHC-P Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human tonsil and colon tissue. WB: Human thymus and lymph node lysate. ICC/IF: Human PBMCs. IP: ab237710 IP in human thymus lysate.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.50 Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	Purity >99%.
Clonality	Monoclonal
Clone number	CAL67
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab237710 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: 26 kDa.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use a concentration of 0.5 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt.

Target

Function

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.

Involvement in disease

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.

Sequence similarities

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

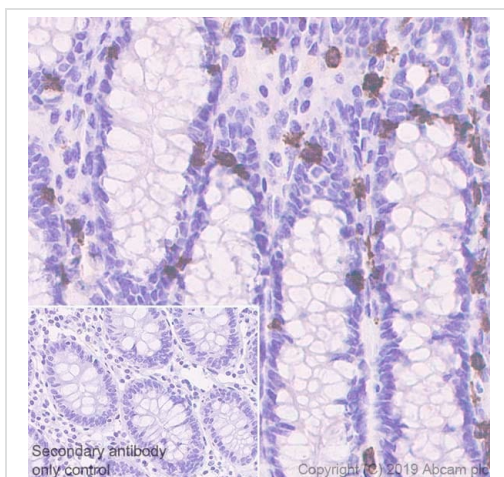
Post-translational modifications

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.

Cellular localization

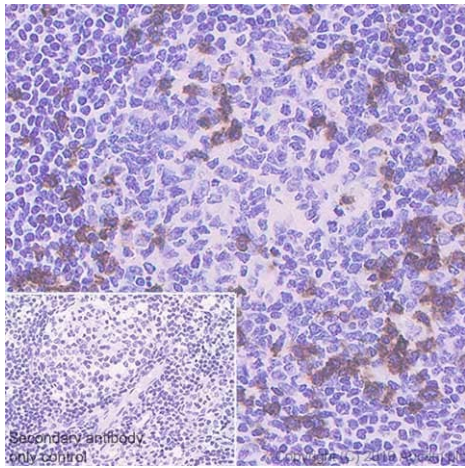
Secreted and Cell membrane.

Images



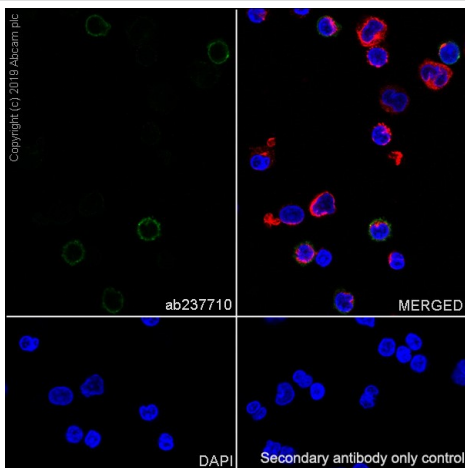
Immunohistochemical analysis of paraffin-embedded human colon tissue labeling CD8 alpha with ab237710 at 1/1500 dilution (0.352 µg/ml), followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the T lymphocytes in the human colon is observed. Counterstained with hematoxylin. Secondary 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).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [CAL67] (ab237710)



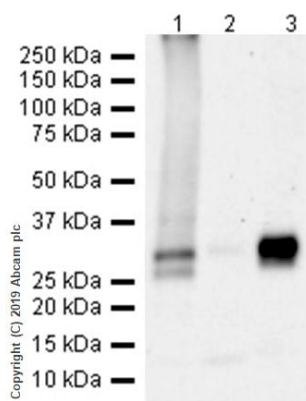
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [CAL67] (ab237710)

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).



Immunocytochemistry/ Immunofluorescence - Anti-CD8 alpha antibody [CAL67] (ab237710)

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.



Western blot - Anti-CD8 alpha antibody [CAL67]
(ab237710)

All lanes : Anti-CD8 alpha antibody [CAL67] (ab237710) at 0.52 $\mu\text{g/ml}$

Lane 1 : Human thymus lysate

Lane 2 : Human spleen lysate

Lane 3 : Human lymph node lysate

Lysates/proteins at 20 μg per lane.

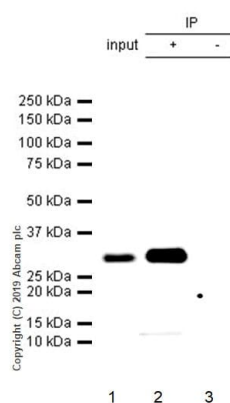
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 26 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-CD8 alpha antibody
[CAL67] (ab237710)

CD8 alpha was immunoprecipitated from 0.35 mg human thymus lysate with ab237710 at 1/30 dilution (2 μg in 0.35mg lysates).

Western blot was performed from the immunoprecipitate using ab237710 at 1/1000 (0.53 $\mu\text{g/ml}$) dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used at 1/5000 dilution.

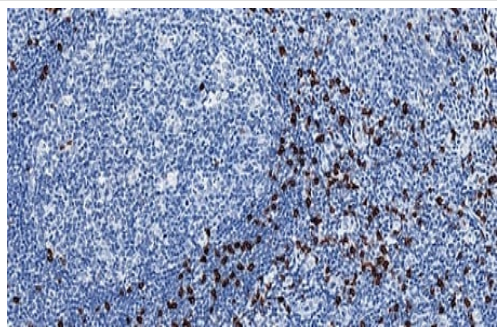
Lane 1: Human thymus lysate 10 μg (Input).

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.







Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [CAL67] (ab237710)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for CD8 alpha using ab237710 at 0.5 µg/ml in immunohistochemical analysis.

Incubate with primary antibody for 75 minutes at room temperature.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-CD8 alpha antibody [CAL67] (ab237710)

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

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