

Product datasheet

Anti-CD8 alpha antibody [EPR21769] (Alexa Fluor® 488) ab237364

Recombinant RabMAb

3 Images

Overview

Product name	Anti-CD8 alpha antibody [EPR21769] (Alexa Fluor® 488)
Description	Rabbit monoclonal [EPR21769] to CD8 alpha (Alexa Fluor® 488)
Host species	Rabbit
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
Tested applications	Suitable for: Flow Cyt, IHC-P
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant fragment within Mouse CD8 alpha aa 1-200. The exact sequence is proprietary. Database link: P01731
Positive control	Flow Cyt: C57BL/6 mouse splenocytes. IHC-P: Normal mouse spleen tissue sections.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here .

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

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Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, PBS
Purity	Immunogen affinity purified
Clonality	Monoclonal
Clone number	EPR21769
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab237364** in the following tested applications.

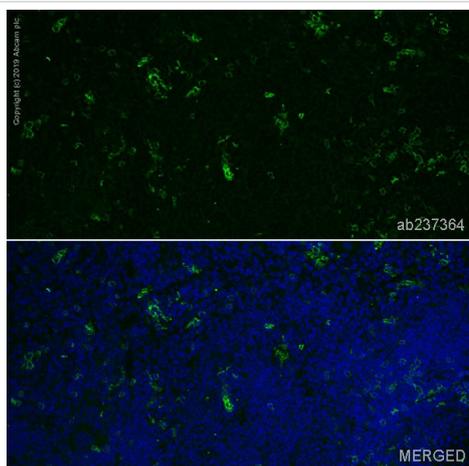
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/500.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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



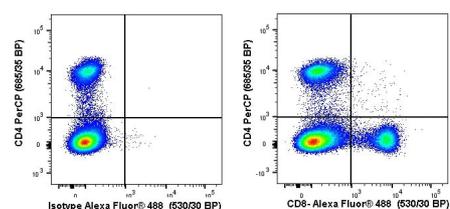
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD8 alpha antibody [EPR21769] (Alexa Fluor® 488) (ab237364)

IHC image of CD8 alpha staining in a section of formalin-fixed paraffin-embedded normal mouse spleen.

The section was pre-treated using heat mediated antigen retrieval with Tris/EDTA buffer (pH9, epitope retrieval solution 2) for 20mins, performed on a Leica BOND™. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab237364 at 1/100 dilution (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.



Flow Cytometry - Anti-CD8 alpha antibody [EPR21769] (Alexa Fluor® 488) (ab237364)

C57BL/6 mouse splenocytes stained with ab237364 (right) or Rabbit IgG Alexa Fluor 488® (monoclonal) (left). C57BL/6 Mouse splenocytes were incubated for 30 mins on ice in 1x PBS containing 10 µg/ml anti CD16/32 antibody and 10% normal goat serum to block FC receptors and non-specific protein-protein interactions followed by the antibody (ab237364) or Rabbit IgG 488 Isotype (1x10⁶ in 100 µl at 1:500 (1 µg/ml)) for 30 mins on ice. The cells were simultaneously stained with CD4 PerCP conjugated antibody.

Acquisition of >50,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable lymphocytes.

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

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

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