Product datasheet

Anti-CD8 alpha antibody [53-6.7] ab25478

Overview

Product name: Anti-CD8 alpha antibody [53-6.7]
Description: Rat monoclonal [53-6.7] to CD8 alpha
Host species: Rat
Specificity: ab25478 recognises a chain of the murine CD8 heterodimer.
Tested applications: Suitable for: ICC/IF, Flow Cyt, IHC-Fr, IP, Functional Studies
Species reactivity: Reacts with: Mouse
Immunogen: The details of the immunogen for this antibody are not available.

General notes

This antibody blocks allogeneic help specific for class I MHC antigens and T cell responses to IL-2.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer: pH: 8.20
Purity: Affinity purified
Primary antibody notes: This antibody blocks allogeneic help specific for class I MHC antigens and T cell responses to IL-2.
Clonality: Monoclonal
Clone number: 53-6.7
Isotype: IgG2a
Light chain type: kappa

Applications

Our Abpromise guarantee covers the use of ab25478 in the following tested applications.
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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>Flow Cyt</td>
<td></td>
<td>Use 2µg for 10^6 cells. ab18450 - Rat monoclonal IgG2a, is suitable for use as an isotype control with this antibody.</td>
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<tr>
<td>IHC-Fr</td>
<td>★★★★☆</td>
<td>Use at an assay dependent concentration. Acetone fixed.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>Functional Studies</td>
<td></td>
<td>Use at an assay dependent concentration. (In vivo and in vitro depletion of CD8a+ cells): Use at an assay dependent dilution. Fractionation of CD8a+ T cells: Use at an assay dependent dilution.</td>
</tr>
</tbody>
</table>

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.

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Cellular localization
Secreted and Cell membrane.
Flow Cytometry analysis of BALB/c mouse splenocytes labeling CD8 alpha with ab25478 at 1 µg/10^6 cells, and Rat Anti-Mouse CD4-UNLB, followed by Mouse Anti-Rat IgG2a-AF647 and Mouse Anti-Rat IgG2b-AF488.

ab25478 staining CD8 alpha in mouse spleen tissue by Immunohistochemistry (frozen sections). Tissue was fixed with acetone and then blocked with 5% serum for 1 hour at 25°C followed by incubation with the primary antibody at a 1/250 dilution for 12 hours at 4°C. A goat anti-rat IgG conjugated to Alexa Fluor®594 was used as secondary antibody at a 1/250 dilution.

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

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