Mouse Anti-Chicken CD8α

Overview

Clone
CT-8

Isotype
Mouse (BALB/c) IgG1 κ

Immunogen
Chicken thymocytes and Ig-negative blood leukocytes

Specificity
Chicken/Turkey/Guinea Fowl/Pigeon CD8α; Mr 34 kDa

Alternate Name(s)
N/A

Description
In the chicken, the CD8 molecule is present in two forms - (i) a homodimer of two α chains and (ii) a heterodimer of an α chain and a β chain. While the vast majority of CD8⁺ cells in the thymus, spleen, and blood of adult chickens express both CD8α- and CD8β-chains, a relatively large proportion of the CD8⁺ TCRγδ cells in the spleens of embryos and young chicks express only the α-chain of CD8. Among intestinal epithelial lymphocytes, the major CD8⁺ T cell populations present in mice are conserved but there is a population of TCRγδ CD8αβ cells in the chicken that is not found in rodents. Chicken CD8 is expressed on approximately 80% of thymocytes, 15% of blood mononuclear cells, and 50% of spleen cells but less than 1% of cells in the bursa and bone marrow. The monoclonal antibody CT-8 recognizes the CD8α chain and has been shown to react to a polymorphic determinant in turkey.

Applications

FC – Quality tested \(^{1,9-16,18}\)
IHC-FS – Reported in literature \(^{2-5}\)
IHC-PS – Reported in literature \(^{6-8}\)
ICC – Reported in literature \(^{17}\)
IP – Reported in literature \(^{1,17}\)
Block – Reported in literature \(^{1}\)

Working Dilutions

<table>
<thead>
<tr>
<th>Flow Cytometry</th>
<th>FITC, BIOT, AF488, and PACBLU conjugates</th>
<th>≤ 1 µg/10⁶ cells</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PE and CY5 conjugates</td>
<td>≤ 0.2 µg/10⁶ cells</td>
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<tr>
<td></td>
<td>APC, SPRD, AF647, and AF700 conjugates</td>
<td>≤ 0.1 µg/10⁶ cells</td>
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For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL.

Other Applications
Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.
- The R-phycocerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaNO₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaNO₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Cyanine 5 (CY5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaNO₃. Store at 2-8°C.
- The Pacific Blue™ (PACBLU), Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), and Alexa Fluor® 700 (AF700) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaNO₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

16. Char D, Sanchez P, Chen CH, Bucy RP, Cooper MD. A third sublineage of avian T cells can be identified with a T cell receptor-3-specific antibody. J Immunol. 1990;145:3547-55. (FC, Turkey and Guinea Fowl Reactivity)

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