Mouse Anti-Chicken TCRγδ

Overview

Clone | TCR-1
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Isotype | Mouse (BALB/c) IgG1κ
Immunogen | Outbred chicken thymocytes and Ig-negative blood lymphocytes
Specificity | Chicken/Milk Snake TCRγδ; Mr 50 & 40 kDa
Alternate Name(s) | T3/TCR complex, TCR gamma/delta

Description

The monoclonal antibody TCR-1 precipitates a heterodimer of Mr 90 kDa (two bands of Mr 50 kDa and 40 kDa upon reduction) on chicken peripheral blood T cells. Deglycosylation of the heterodimer yields two polypeptides of Mr 35 kDa and 32 kDa. Unlike human and mouse in which γδ cells comprise a minor subset of T lymphocytes in the circulation, the chicken has a relatively large subset of γδ T cells. The frequency of TCRγδ cells is typically 20-25% of the total blood T cells but may reach approximately 50% in chickens of six-months of age. The majority of TCRγδ cells in the thymus and blood are CD4+CD8- although a small subset of them may express CD8 or CD4 coreceptors. However, when the TCRγδ+ cells migrate into the spleen and intestine most of them begin to express CD8. Although the biological function of γδ T cells is unclear, they are clearly capable of cytotoxic activity in vitro. The CD8+ γδ T cells may also be involved in down-regulation of the immune response. They cannot, however, induce a graft-vs-host (GVH) reactions.

Applications

FC – Quality tested 1,2,8-13
IHC-FS – Reported in literature 3,4
IHC-PS – Reported in literature 5,6
IP – Reported in literature 1,2
Depletion – Reported in literature 7

Working Dilutions

Flow Cytometry

FITC, BIOT, and AF488 conjugates
≤ 1 μg/10⁶ cells
PE conjugate
≤ 0.2 μg/10⁶ cells
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-phycoerythrin (PE) 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 Alexa Fluor 488 (AF488) conjugate is 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


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