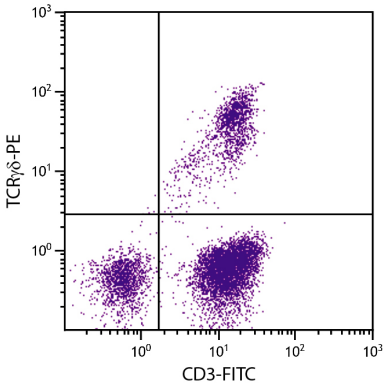
SouthernBiotech

Mouse Anti-Chicken TCRγδ

Cat. No.	Format	Size
8230-01	Purified (UNLB)	0.5 mg
8230-02	Fluorescein (FITC)	0.5 mg
8230-08	Biotin (BIOT)	0.5 mg
8230-09	R-phycoerythrin (PE)	0.1 mg
8230-30	Alexa Fluor 488® (AF488)	0.1 mg



Chicken peripheral blood lymphocytes were stained with Mouse Anti-Chicken TCRγδ-PE (SB Cat. No. 8230-09) and Mouse Anti-Chicken CD3-FITC (SB Cat. No. 8200-02).

Overview

Clone	TCR-1
Isotype	Mouse (BALB/c) $IgG_1\kappa$
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 $TCR\gamma\delta^+$ cells in the thymus and blood are $CD4^-CD8^-$ although a small subset of them may express CD8 or CD4 coreceptors. However, when the $TCR\gamma\delta^+$ 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/10^6 cells
	PE conjugate	≤ 0.2 μg/10^6 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.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

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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/NaN_3. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN_3 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/NaN_3. 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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3. Tanimura N, Sharma JM. Appearance of T cells in the bursa of Fabricius and cecal tonsils during the acute phase of infectious bursal disease virus infection in chickens. Avian Dis. 1997;41:638-45. (IHC-FS)
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5. Solcan C, Solcan G, Cotea C. Immunotoxic action of ochratoxine A on lymphocytes from lymphoid tissues associated to gut mucosa in chickens. Bulletin UASVM Agriculture. 2010;67:283-90. (IHC-PS)
6. Teixeira AR, Gomes C, Nitz N, Sousa AO, Alves RM, Guimaro MC, et al. Trypanosoma cruzi in the chicken model: Chagas-like heart disease in the absence of parasitism. PLoS Negl Trop Dis. 2011;5(3):e1000. (IHC-PS)
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9. Conrad ML, Davis WC, Koop BF. TCR and CD3 antibody cross-reactivity in 44 species. Cytometry. 2007;71A:925-33. (FC, Milk Snake Reactivity)
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11. Laniewski P, Kuczkowski M, Chrząstek K, Woźniak A, Wyszyńska A, Wieliczko A, et al. Evaluation of the immunogenicity of Campylobacter jejuni CjaA protein delivered by Salmonella enterica sv. Typhimurium strain with regulated delayed attenuation in chickens. World J Microbiol Biotechnol. 2014;30:281-92. (FC)
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