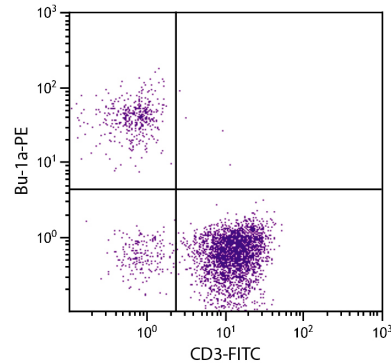




Mouse Anti-Chicken Bu-1a

Cat. No.	Format	Size
8365-01	Purified (UNLB)	0.5 mg
8365-02	Fluorescein (FITC)	0.5 mg
8365-08	Biotin (BIOT)	0.5 mg
8365-09	R-phycoerythrin (PE)	0.1 mg



Chicken peripheral blood lymphocytes were stained with Mouse Anti-Chicken Bu-1a-PE (SB Cat. No. 8365-09) and Mouse Anti-Chicken CD3-FITC (SB Cat. No. 8200-02).

Overview

Clone	21-1A4
Isotype	Mouse (BALB/c) IgG ₁ κ
Immunogen	Bursa cells from one-day-old H.B15 (Bu-1 ^{a/b}) strain chickens
Specificity	Chicken Bu-1a; Mr 64 kDa
Alternate Name(s)	ChB6.1

Description

Chicken Bu-1a, a product of the Bu-1^a allele, is expressed on the cell surface as a disulfide-linked homodimer. In 10-week-old H.B15 and H.B2 chickens, Bu-1 is found on 85-90% of bursal cells, 2-8% of thymocytes, 15-27% of spleen cells, and 2-18% of peripheral blood cells. It is also expressed on subsets of macrophages and monocytes but not on granulocytes, erythrocytes, or thrombocytes. In chickens heterozygous for the Bu-1 alleles (Bu-1^{a/b}), Bu-1a does not exhibit allelic exclusion. The monoclonal antibody 21-1A4 does not react with cells from CHA and H.B14ab strains by immunofluorescence.

Applications

FC – Quality tested ^{1,5-9}
 IHC-FS – Reported in literature ²
 ICC – Reported in literature ¹
 IP – Reported in literature ^{3,4}
 Apop – Reported in literature ⁴

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 µg/10 ⁶ cells
	FITC and BIOT conjugates	≤ 1 µg/10 ⁶ cells
	PE conjugates	≤ 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.

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/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- 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

1. Veromaa T, Vainio O, Eerola E, Toivanen P. Monoclonal antibodies against chicken Bu-1a and Bu-1b alloantigens. *Hybridoma*. 1988;7:41-8. (Immunogen, ICC, FC)
2. Sayegh CE, Ratcliffe MJ. Perinatal deletion of B cells expressing surface Ig molecules that lack V(D)J-encoded determinants in the bursa of Fabricius is not due to intrafollicular competition. *J Immunol*. 2000;164:5041-8. (IHC-FS)
3. Huffnagle GB, Ratcliffe MJ, Humphries EH. Bu-2, a novel avian cell surface antigen on B cells and a population of non-lymphoid cells, is expressed homogeneously in germinal centers. *Hybridoma*. 1989;8:589-604. (FC, IP)
4. Funk PE, Pifer J, Kharas M, Crisafi G, Johnson A. The avian chB6 alloantigen induces apoptosis in DT40 B cells. *Cell Immunol*. 2003;226:95-104. (IP, Apop)
5. Ratcliffe MJ. Generation of immunoglobulin heavy chain diversity subsequent to cell surface immunoglobulin expression in the avian bursa of Fabricius. *J Exp Med*. 1989;170:1165-73. (FC)
6. Pararnithiotis E, Jacobsen KA, Ratcliffe MJ. Loss of surface immunoglobulin expression precedes B cell death by apoptosis in the bursa of Fabricius. *J Exp Med*. 1995;181:105-13. (FC)
7. Sayegh CE, Demaries SL, Iacampo S, Ratcliffe MJ. Development of B cells expressing surface immunoglobulin molecules that lack V(D)J-encoded determinants in the avian embryo bursa of fabricius. *Proc Natl Acad Sci USA*. 1999;96:10806-11. (FC)
8. Hunt HD, Goto RM, Foster DN, Bacon LD, Miller MM. At least one YMHCI molecule in the chicken is alloimmunogenic and dynamically expressed on spleen cells during development. *Immunogenetics*. 2006;58:297-307. (FC)
9. Alitheen NB, McClure SJ, Yeap SK, Kristeen-Teo YW, Tan SW, McCullagh P. Establishment of an in vitro system representing the chicken gut-associated lymphoid tissue. *PLoS One*. 2012;7(11):e49188. (FC)