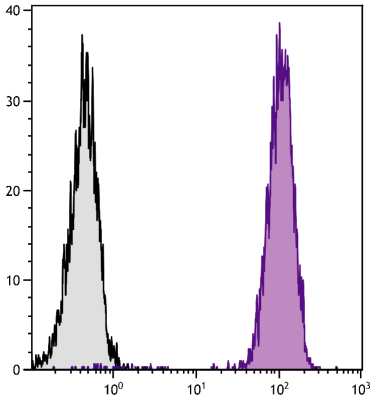
SouthernBiotech

Mouse Anti-Chicken MHC Class I

Cat. No.	Format	Size
8345-01	Purified (UNLB)	0.5 mg
8345-02	Fluorescein (FITC)	0.5 mg
8345-08	Biotin (BIOT)	0.5 mg
8345-09	R-phycoerythrin (PE)	0.1 mg



Chicken peripheral blood lymphocytes were stained with Mouse Anti-Chicken MHC Class I-UNLB (SB Cat. No. 8345-01) followed by Goat Anti-Mouse IgG1, Human ads-FITC (SB Cat. No. 1070-02).

Overview

Clone F21-2
Isotype Mouse (BALB/c) $IgG_1\kappa$
Immunogen Unknown
Specificity Chicken/Turkey MHC Class I α-chain; Mr 40-43 kDa
Alternate Name(s) B-F

Description

Like their mammalian counterparts, avian MHC Class I molecules, also known as B-F antigens, consist of a highly polymorphic α-chain noncovalently bound to the invariant β_2-microglobulin subunit. MHC Class I molecules are expressed on most nucleated cells where they present endogenously synthesized antigenic peptides to $CD8^+$ T lymphocytes, which are usually cytotoxic T cells. The monoclonal antibody F21-2 also reacts with turkey MHC Class I.

Applications

FC – Quality tested [3,8-12]
IHC-FS – Reported in literature [3,4]
EM – Reported in literature [13]
IP – Reported in literature [1,2,5]
WB – Reported in literature [1,2]
Purification – Reported in literature [1,2,6]
Block – Reported in literature [7]

Working Dilutions

Flow Cytometry	FITC and BIOT conjugates	$\leq$ 1 $\mu g/10^6$ cells
	PE conjugate	$\leq$ 0.2 $\mu g/10^6$ 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!**
- 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. Dunon D, Salomonsen J, Skjødt K, Kaufman J, Imhof BA. Ontogenic appearance of MHC class I (B-F) antigens during chicken embryogenesis. Dev Immunol. 1990;1:127-35. (IHC-FS, FC)
4. Subedi K, Yoshimura Y. Expression of MHC class I and II in growing ovarian follicles of young and old laying hens, Gallus domesticus. J Poult Sci. 2005;42:101-9. (IHC-FS)
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6. Wallny H, Avila D, Hunt LG, Powell TJ, Riegert P, Salomonsen J, et al. Peptide motifs of the single dominantly expressed class I molecule explain the striking MHC-determined response to Rous sarcoma virus in chickens. Proc Natl Acad Sci USA. 2006;103:1434-9. (Purification)
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8. Del Cacho E, Gallego M, Lillehoj HS, López-Bernard F, Sánchez-Acedo C. Avian follicular and interdigitating dendritic cells: isolation and morphologic, phenotypic, and functional analyses. Vet Immunol Immunopathol. 2009;129:66-75. (FC)
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10. Sunkara LT, Achanta M, Schreiber NB, Bommineni YR, Dai G, Jiang W, et al. Butyrate enhances disease resistance of chickens by inducing antimicrobial host defense peptide gene expression. PLoS One. 2011;6(11):e27225. (FC)
11. Verweij MC, Lipińska AD, Koppers-Lalic D, van Leeuwen WF, Cohen JI, Kinchington PR, et al. The capacity of UL49.5 proteins to inhibit TAP is widely distributed among members of the genus Varicellovirus. J Virol. 2011;85:2351-63. (FC)
12. Meyerhoff RR, Ali RA, Liu K, Huang G, Koci MD. Comprehensive analysis of commercially available mouse antichicken monoclonal antibodies for cross-reactivity with peripheral blood leukocytes from commercial turkeys. Poult Sci. 2012;91:383-92. (FC, Turkey Reactivity)
13. del Cacho E, Gallego M, Lee SH, Lillehoj HS, Quilez J, Lillehoj EP, et al. Induction of protective immunity against Eimeria tenella infection using antigen-loaded dendritic cells (DC) and DC-derived exosomes. Vaccine. 2011;29:3818-25. (EM)

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