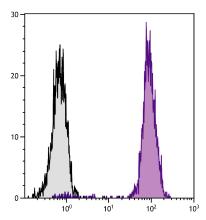




Mouse Anti-Chicken β₂-Microglobulin

Cat. No.	Format	Size
8355-01	Purified (UNLB)	0.5 mg
8355-02	Fluorescein (FITC)	0.5 mg
8355-08	Biotin (BIOT)	0.5 mg
8355-09	R-phycoerythrin (PE)	0.1 mg



Chicken peripheral blood lymphocytes were stained with Mouse Anti-Chicken β_2 -Microglobulin-UNLB (SB Cat. No. 8355-01) followed by Goat Anti-Mouse lgG_1 , Human ads-FITC (SB Cat. No. 1070-02).

Overview

Clone F21-21

Isotype Mouse (BALB/c) $IgG_1\kappa$

ImmunogenAffinity purified chicken MHC-I moleculesSpecificityChicken/Turkey $β_2$ -Microglobulin; Mr ~14 kDa

Alternate Name(s) MHC Class I, 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 F21-21 also reacts with turkey β_2 -microglobulin.

Applications

FC – Quality tested ^{4,6-10}
ICC – Reported in literature ³
IP – Reported in literature ^{5,6}
WB – Reported in literature ^{1,2}

Purification – Reported in literature ^{1,4,6}

Working Dilutions

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

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. Skjødt K, Welinder KG, Crone M, Verland S, Salomonsen J, Simonsen M. Isolation and characterization of chicken and turkey beta2-microglobulin. Mol Immunol. 1986;23:1301-9. (Immunogen, WB, Purification, Turkey Reactivity)
- 2. Walker BA, Hunt LG, Sowa AK, Skjødt K, Göbel TW, Lehner PJ, et al. The dominantly expressed class I molecule of the chicken MHC is explained by coevolution with the polymorphic peptide transporter (TAP) genes. Proc Natl Acad Sci USA. 2011;108:8396-401. (WB)
- 3. Adair BM, McNeilly F, McConnell CD, McNulty MS. Characterization of surface markers present on cells infected by chicken anemia virus in experimentally infected chickens. Avian Dis. 1993;37:943-50. (ICC)
- 4. Dunon D, Kaufman J, Salomonsen J, Skjoedt K, Vainio O, Thiery J, et al. T cell precursor migration towards β2-microglobulin is involved in thymus colonization of chicken embryos. EMBO J. 1990;9:3315-22. (Purification, FC)
- 5. Møller LB, Kaufman J, Verland S, Salomonsen J, Avila D, Lambris JD, et al. Variations in the cytoplasmic region account for the heterogeneity of the chicken MHC class I (B-F) molecules. Immunogenetics. 1991;34:110-20. (IP)
- 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. (FC, IP, Purification)
- 7. Buitenhuis AJ, Kjaer JB, Labouriau R, Juul-Madsen HR. Altered circulating levels of serotonin and immunological changes in laying hens divergently selected for feather pecking behavior. Poult Sci. 2006;85:1722-8. (FC)
- 8. Juul-Madsen HR, Dalgaard TS, Røntved CM, Jensen KH, Bumstead N. Immune response to a killed infectious bursal disease virus vaccine in inbred chicken lines with different major histocompatibility complex haplotypes. Poult Sci. 2006;85:986-98. (FC)
- 9. Dalgaard T, Boving MK, Handberg K, Jensen KH, Norup LR, Juul-Madsen HR. MHC expression on spleen lymphocyte subsets in genetically resistant and susceptible chickens infected with Marek's disease virus. Viral Immunol. 2009;22:321-7. (FC)
- 10. 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)

Email: info@southernbiotech.com • Website: www.southernbiotech.com