### Overview

**Clone**
F21-21  

**Isotype**
Mouse (BALB/c) IgG1κ  

**Immunogen**
Affinity purified chicken MHC-I molecules  

**Specificity**
Chicken/Turkey β2-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 β2-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 β2-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/10⁶ cells  
- FITC and BIOT conjugates ≤ 1 μg/10⁶ cells  
- PE conjugate ≤ 1 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!**
- 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

8. Juul-Madsen HR, Dalgaard TS, Rentved 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)