

PERFORMANCE DATA SHEET

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Monoclonal anti-human MHC Class I (HLA-A, B and C)/FITC*

mAb name/Clone: 3F10

Isotype: Mouse IgG2a

Immunogen: Human HSB-2 T cell line

CATALOG#: 121-040

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6ul per 5×10^5 -cell test)

INFORMATION: Human MHC Class I (HLA-A, B & C) molecules are expressed on nearly all nucleated cells. MHC Class I molecules consist of heterodimers of a highly polymorphic transmembrane α chain and an invariant β chain. MHC Class I molecules bind to endogenously synthesized peptides of about 8-10 amino acids which are presented to CD8⁺ T cells. Recent evidence now indicates exogenously derived peptides are also presented by MHC Class I molecules. Antibody 3F10 recognizes a monomorphic Class I epitope on the α chain.

References: G.S. Eisenbarth, et al, (1980) J Immunol **124**: 1237-1244. P.J. Bjorkman & P. Parham, (1990) Annu Rev Biochem **59**: 253-288. L.D. Barber & P. Parham, (1994) J Exp Med **180**: 1191-1194. K.L. Rock, (1996) Immunol Today **17**: 131-137.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/Thawing is not recommended. **Protect from light.**

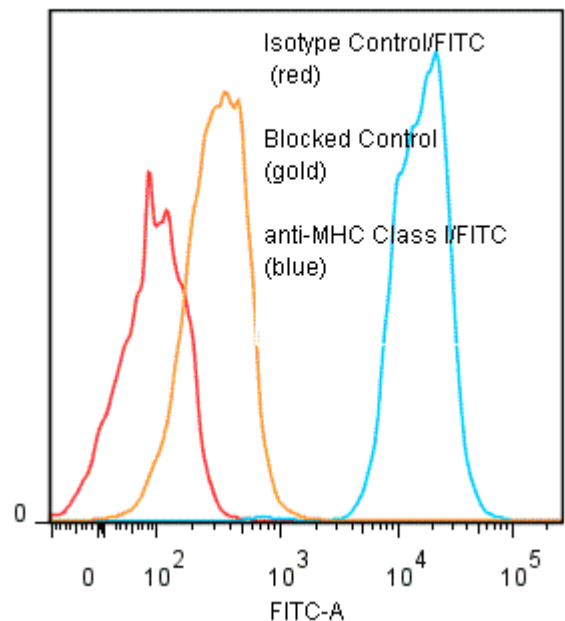
PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: _____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to 95% Immunoglobulin by SDS-PAGE, and reacted with FITC. Unconjugated FITC was removed from conjugate using a desalting column. Antibody conjugate is at **0.25 mg/ml** with a Fluorescein/IgG molar ratio of 6.9.

PERFORMANCE: Five $\times 10^5$ ficoll prepared human PBMC were washed and incubated 45 minutes on ice with 80 μ l of anti-MHC Class I/FITC at a **1:50** dilution (5 μ g/ml). Cells were washed three times, fixed and analyzed by FACS using a lymphoid gate. Cells stained positive (98%) with a mean shift of **2.24** log₁₀ fluorescent units when compared to a Mouse IgG2a/FITC negative control (Catalog #281-040). Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-MHC Class I antibody (Catalog #121-020).

Binding of anti-MHC Class I/FITC to human PBL



* **Research Use Only. Not for use in Diagnostic procedures.**