

PERFORMANCE DATA SHEET

3321

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

mAb name/Clone: 3F10

Isotype: Mouse IgG2a

Immunogen: Human HSB-2 T cell line

CATALOG#: 121-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6ul of concentrated stock 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. *Do not freeze! 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, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **0.5 mg/ml** with an A565/A280 ratio of 2.98.

PERFORMANCE: Five $\times 10^5$ cultured **HPB-MLT** cells were washed and incubated 45 minutes on ice with 80 μ l of anti-MHC Class I/R-PE at a **1:50** dilution (10 μ g/ml). They were then washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.98** log₁₀ fluorescent units when compared to a Mouse IgG2a/R-PE negative control (Catalog # 281-050). 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).

**Research use only. Not for use in Diagnostic procedures.*

Binding of anti-MHC Class I/PE to human HPB-MLT cells

