

## PERFORMANCE DATA SHEET

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

**mAb name/Clone:** 3F10

**Isotype:** Mouse IgG2a

**Immunogen:** Human HSB-2 T cell line

**CATALOG#:** 121-020

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**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  $\alpha$  chain and an invariant  $\beta$  chain. MHC Class I molecules bind to endogenously synthesized peptides of about 8-10 amino acids which are presented to CD8<sup>+</sup> 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  $\alpha$  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.

**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, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE with less than 1% Bovine Immunoglobulin.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured HPB-MLT cells were washed and incubated 45 minutes on ice with 80 µl of anti-MHC Class I antibody at 10 µg/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.17 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2a isotype control (Catalog #281-010) at a similar concentration.

*\*This Product is intended for Laboratory Research use only.*

**Binding of anti-MHC Class I mAb + GAM/FITC to human HPB-MLT cells**

