

**PERFORMANCE DATA SHEET**

2125

**Monoclonal anti-human CD4/Biotin\***

**mAb name/Clone:** QS4120

**Isotype:** Mouse IgG1

**Immunogen:** CD4+ transfectant/ CEM

**CATALOG#:** 147-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD4 is a cell surface glycoprotein of 55 kd expressed on most thymocytes, on about two thirds of peripheral T cells, and on some monocyte macrophage lineage cells. CD4 interacts with MHC Class II molecules in an accessory role during foreign antigen recognition by T cells. The extracellular portion of CD4 is an array of four Ig-like domains. The amino terminal region of CD4 is a receptor for the HIV-1 viral protein gp120. Antibody QS4120 recognizes the domain 1 region of the CD4 molecule. Antibody QS4120 will block binding of HIV-1 gp120 protein to CD4 and also blocks HLA Class II Rosette formation.

**References:** D. Healey, et al, (1990) J Exp Med **172**: 1233-1242. Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) p. 314-330. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 476-478. R. König, et al, (1995) J Exp Med **182**: 779-787.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/thawing not recommended.

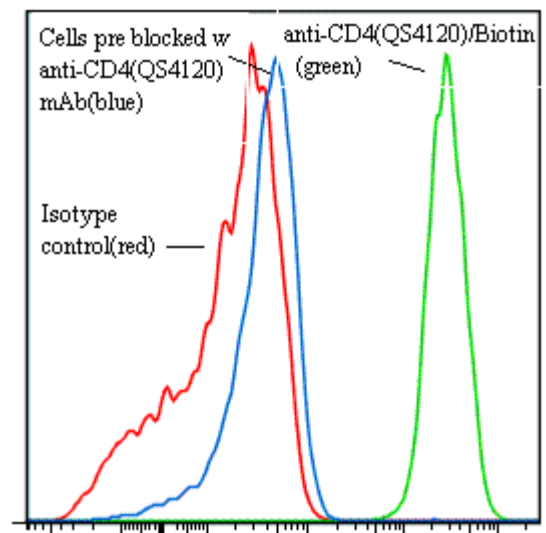
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% Na<sub>3</sub> (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 NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured HPB-MLT cells were washed and incubated 45 minutes on ice with 80 µl of product at a concentration of 5 µg/ml. Cells were then washed twice and incubated 45 minutes with 20 µl of 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.65 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD4(QS4120) antibody (Catalog #147-020).

**Binding of anti-CD4(QS4120)/Biotin +SA/PE to human HPB-MLT cells**



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