

PERFORMANCE DATA SHEET

1846

Monoclonal anti-human CD4/FITC*

mAb name/Clone: QS4120

Isotype: Mouse IgG1

Immunogen: CD4+ transfectant/ CEM

CATALOG#: 147-040

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-cell test)

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 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: Protein A purified antibody from tissue culture supernatant was reacted with FITC.

Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at 0.25 mg/ml with a Fluorescein/IgG molar ratio of 5.9.

PERFORMANCE: Five x 10⁵ ficoll prepared human Peripheral Blood Mononuclear Cells (PBMC) were washed and incubated 45 minutes on ice with 80 µl of anti-CD4/FITC at a dilution factor of 1:50 (5 µg/ml). Cells were washed three times, fixed and analyzed by FACS. A 41% sub population of the cells stained positive with a mean shift of 1.1 log₁₀ fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog #278-040) 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).

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

Binding of anti-CD4/FITC to human PBMC

