## PERFORMANCE DATA SHEET

1817

## Monoclonal anti-human CD40/R-PE\*

*mAb name/Clone:* **BE-1** *Isotype:* Mouse IgG1

Immunogen: Murine L cell transfectants expressing human CD40

CATALOG#: 189-050

QUANTITY: 120 tests

VOLUME IN VIAL: 200 µl

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10<sup>5</sup>-cell test)

**INFORMATION:** Human CD40 is a member of the tumor necrosis factor (TNF) receptor family and is present on all B cells except plasma cells. CD40 is also found on some epithelial cells, carcinomas and lymphoid dendritic cells. CD40 plays an important role in B cell activation and the interaction with its ligand CD154 (CD40 Ligand) is essential for isotype switching (1). The CD40-CD154 interaction appears to have a role in artherosclerosis and cardiovascular disorders (3,4,5). Antibody EA-5 recognizes the CD40 molecule of about 44 kd. Binding of cross linked EA-5 will partially activate B cells.

**REFERENCES: 1)** T.A. Foy, et al, (1996) Annu Rev Immunol 14: 591-617. **2)** M.E. Ozaki, et al, (1997) J Immunol 159: 214-221. **3)** F. Mach, et al, (1997) Proc Natl Acad Sci USA 94:1931-1936. **4)** U. Schonbeck, et al, (2000) *PNAS USA* 97: 7458-7463. **5)** U. Schonbeck, et al, (2001) *Circulation* 104: 2266-2268.

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:\_\_\_\_\_

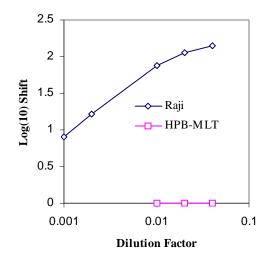
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**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 approximately **0.5 mg/ml**.

**PERFORMANCE:** Five x  $10^5$  cultured **Raji** human tumor cells were incubated 45 minutes on ice with 80  $\mu$ l of anti-CD40/R-PE at a **1:50** dilution ( $10\mu$ g/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **2.06**  $\log_{10}$  fluorescent units when compared to a Mouse IgG1/PE negative control (Catalog #278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-CD40 (BE-1) antibody (Catalog #189-020).

\*This Product is intended for Laboratory Research use only. R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.

Binding of anti-CD40/R-PE to human cell lines



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