**PERFORMANCE DATA SHEET**
**2407**

# Human CD152(CTLA-4)-muIg/R-PE *Fusion Protein**
## (also binds to mouse CD80/CD86)

**CATALOG#: 501-050**
**QUANTITY: 50 tests** **VOLUME IN VIAL: 200 µl**
**WORKING DILUTION: 1:20** (or use 4 ul of concentrated stock per 5 x $10^5$-cell test)

***Molecular Structure:*** A soluble 110 kd dimeric fusion protein consisting of the extracellular (125aa) domain of human CD152 (CTLA-4) fused to murine IgG2a Fc
***Transfectant Cell Line:*** BHK

***INFORMATION:*** Immune response mediated by T cells can be characterized to functionally proceed as follows: antigen recognition by the T cell receptor, activation through costimulation, effector activities to eliminate antigen and finally down regulation. Human CD152 is a cell surface glycoprotein expressed at low levels on activated T cells. CD152 is a high affinity receptor for the costimulatory molecules CD80 (B7-1) and CD86 (B7-2) and appears to function as a negative regulator of T cell activation. Therefore, CD152 may be an important player in down regulating T cell mediated immune responses. The CD152 Ig fusion protein has biological activity and binds with high affinity to human or mouse CD80 (B7-1) and CD86 (B7-2). CD152 Ig will block the binding of anti-CD80 (B7-1) and anti-CD86 (B7-2) monoclonal antibodies.
***References:*** T. Lindsten, et al, (1993) J Immunol **151**: 3489-3499. T.L. Walunas, et al, (1994) Immunity **1**: 405-413. N.J. Karandikar, et al, (1996) J Exp Med **184**: 783-788. A.H. Cross, et al, (1995) J Clin Invest **95**: 2783-2789. P.A. Morton, et al, (1996) J Immunol **156**: 1047-1054. Martin K. Oaks and Karen M. Hallett, (2000) J Immunol **164**: 5015-5018. S.J. Fass, et al, (2000) J Immunol **164**: 6340-6348.

**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:_____

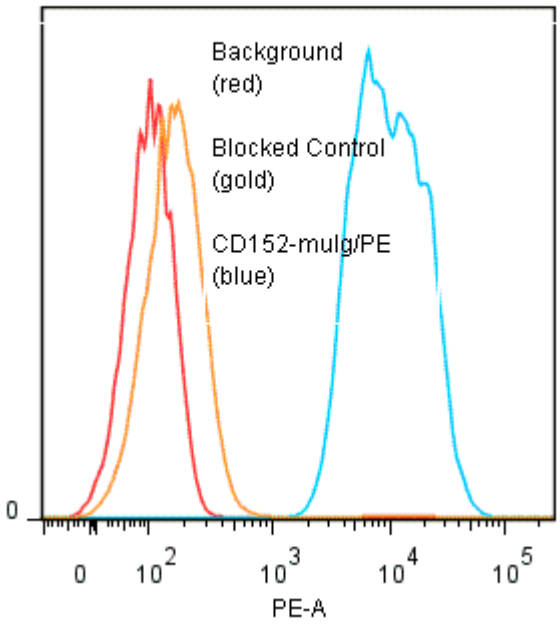
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% $NaN_3$ (as a preservative)

**PRODUCTION:** Human CD152-muIg fusion protein from tissue culture supernatant of BHK transfectants was Protein A purified to >95% by SDS-PAGE (<1% bovine immunoglobulin), and conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated fusion protein was removed using size exclusion chromatography. CD152-muIg/R-PE conjugate is at **0.2 mg/ml** with an $A_{565}/A_{280}$ ratio of 3.97.

**PERFORMANCE:** Five x $10^5$ cultured **Raji** human tumor cells were washed and incubated 45 minutes on ice with 80 µl of CD152-muIg/R-PE at a dilution factor of **1:20** (10 µg/ml). Cells were washed three times, fixed and analyzed using by FACS . The cells stained positive with a mean shift of **2.05** $\log_{10}$ fluorescent units when compared to a Mouse IgG2a/R-PE negative control (Catalog # 281-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml un conjugated CD152-muIg (cat #501-020).

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

**Binding of recombinant CD152-muIg/PE to human Raji cells**

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