PERFORMANCE DATA SHEET
2825

Human CD152(CTLA-4) Ig/FITC *Fusion Protein**
(also binds to mouse CD80/CD86)

CATALOG#: 501-040
QUANTITY: 50 tests **VOLUME IN VIAL: 200 µl**
WORKING DILUTION: 1:20 (or use 4µl 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.

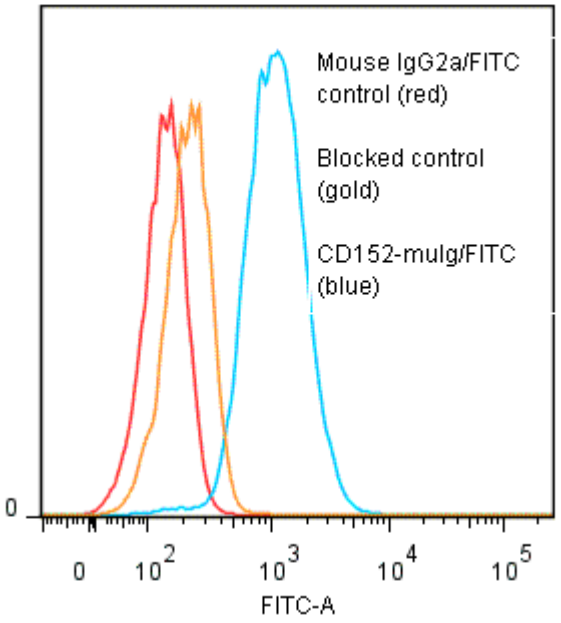
PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:_____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN_3 (as a preservative).

PRODUCTION: Human CD152 Ig fusion protein from tissue culture supernatant of BHK transfectants was Protein A purified to >95% by SDS-PAGE (<1% bovine immunoglobulin), and reacted with FITC. Unconjugated FITC was removed from conjugate using a desalting column. The fusion protein/FITC conjugate is at **20 µg/ml** with a Fluorescein/IgG molar ratio of 10.8.

PERFORMANCE: Five x 10^5 cultured **Raji** human tumor cells were washed and incubated 45 minutes on ice with 80 µl of CD152 Ig/FITC at a **1:20** dilution factor (1 µg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **0.93** $\log_{10}$ fluorescent units when compared to a Mouse IgG2a/FITC negative control (Catalog #281-040). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml unlabeled CD152-muIg (Catalog #501-020).

Binding of CD152-mulg/FITC to human Raii cells



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