

PERFORMANCE DATA SHEET

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For maximal recovery of contents
please quick spin vial before opening

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

CATALOG#: 501-820 (Preservative Free)

QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

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. Open under aseptic conditions. Freeze/Thawing is 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. Product was sterile filtered under aseptic conditions.

PRODUCTION: Product was Protein A purified from (low FBS containing) tissue culture supernatant of BHK transfectants. Purity was >95% by SDS-PAGE with less than 1% Bovine Immunoglobulin. Product was 0.2µ sterile-filtered and vialled under aseptic conditions

PERFORMANCE: Five x 10⁵ cultured **Raji** human tumor cells were washed and incubated 45 minutes on ice with 80 µl of CD152 muIg at 1 µg/ml. Cells were washed twice and incubated with 2° reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.56 log₁₀ fluorescent units when compared compared to a muIgFc recombinant control protein (Catalog # 581-020) at a similar concentration. Binding was blocked when reagent was pre incubated with 100 µg/ml of anti-CD152 antibody (Catalog #359-020).

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

Binding of CD152-muIg + GAM/FITC to human Raji cells

