

PERFORMANCE DATA SHEET

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Human CD152(CTLA-4)-muIg/Biotin Fusion Protein*
(also binds to mouse CD80/CD86)For maximal recovery of contents
please quick spin vial before opening**CATALOG#: 501-030****QUANTITY: 25 µg****CONCENTRATION: 0.25 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. 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, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (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 NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

PERFORMANCE: Five x 10⁵ cultured **Raji** human tumor cells were washed and incubated 45 minutes on ice with 80 µl of CD152-muIg/Biotin at a concentration of **0.5 µg/ml**. Cells were washed twice and incubated with 2^o reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.81 log₁₀** fluorescent units when compared to Recombinant muIg/Biotin negative control (Catalog #581-030) at a similar concentration. Binding was blocked when cells were pre blocked with 20 µl of 0.5 mg/ml unlabeled CD152-muIg (Catalog #501-020).

**This Product is intended for Laboratory Research use only.*

Binding of CD152-muIg/Biotin + SA/PE to human Raji cells