PERFORMANCE DATA SHEET
1819

For maximal recovery of contents please quick spin vial before opening

Human CD278(ICOS)-muIg Fusion Protein*

CATALOG#: 517-820 (Preservative-free)
QUANTITY: 25 μg **CONCENTRATION: 0.5 mg/ml**

Molecular Structure: A soluble molecule consisting of the extracellular (121aa) domain of mature human ICOS fused to the murine IgG2a Fc (232 aa). Predicted monomeric weight is 42.8 kd (amino acid composition only).

Transfectant Cell Line: CHO

INFORMATION: The inducible costimulator (ICOS, T cell activation molecule H4) is similar to human CD28 (24% homology), and plays an analogous role in the T cell activation process. Each secondary signal from CD28 or ICOS results in a discrete cytokine secretion profile displayed by the activated T cell.[1] Both activation processes are effectively down regulated by CD152 (CTLA-4) engagement.[2] Human GL50 is a member of the B7 family sharing ~20% homology with CD80 (B7-1) and CD86 (B7-2), and has been shown to be a ligand for ICOS.[3] ICOS-muIg recombinant protein binds to recombinant GL50-muIg in EIA.

References: Beier, K.C., R.A. Kroczek, et al. 2000, *Eur J Immunol*. **30**(12):3707-3717. [2] Riley, J.L., C.H. June, et al. 2001, *J. Immunol.* **166**: 4943-4948. [3] Ling, V., M. Collins, et al. 2000, *J. Immunol*. **164**: 1653-1657. [4] Ling, V., M. Collins, et al. 2001, *J. Immunol*. **166**: 7300-7308. [5] A.J. McAdam, et al, (2000) *J Immunol* **165:** 5035-5040.

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 7.6, 100mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

PRODUCTION: Fusion protein from (low FBS containing) tissue culture supernatant of transfectants was purified using size exclusion chromatography. Product was 0.2μ sterile-filtered and vialed under aseptic conditions.

PERFORMANCE: ICOS-muIg fusion protein binds to Raji cells in FACS. Five x 10^5 cultured **Raji** human tumor cells were washed and incubated 45 minutes on ice with 80 μl of ICOS-muIg at **5 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 **0.42** $\log_{10}$ fluorescent units when compared to a Mouse IgG2a negative control (Catalog #281-010) at a similar concentration. Binding was blocked when reagent was pre incubated with 100 μg/ml of recombinant GL50(ICOSL)-muIg (Catalog #516-020).

ICOS-muIg fusion protein was reactive in EIA using a Goat-anti-mouse-Ig antibody capture, followed by detection using GL50-muIg/Biotin (Cat #516-030) and Streptavidin/HRP.

Amino acid sequence of fusion protein was confirmed by n-terminal analysis (EINGS).

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

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