## Human CD27-muIg Fusion Protein\*

## CATALOG#: 543-820 (Preservative-free) QUANTITY: 25 µg

## **CONCENTRATION: 0.5 mg/ml**

Molecular Structure: A soluble molecule consisting of murine CD8 alpha signal peptide residual amino acids and linker: (1)kpqapelrgs(10) A CD70-reactive n-terminal section of the mature extracellular domain of human CD27:

(11) kscperhvwagklccqmcepgtflvkdcdphrkaaqcdpcipgvsfspdhhtrphcescrhcnsgllvrnctitanaecacrngwqcrdkectecdplpnps (113) linker (114)gt(115)

murine IgG2a Fc + hinge regions: (116)

eprgptikpcppckcpapnllggpsvfifppkikdvlmislspivtcvvvdvseddpdvqiswfvnnvevhtaqtqthredynstlrvvsalpiqhqdwmsgkefkckvnnkdlpapier tiskpkgsvrapqvyvlpppeeemtkkqvtltcmvtdfmpediyvewtnngktelnykntepvldsdgsyfmysklrvekknwvernsyscsvvheglhnhhttksfsrtpgk (348) The molecule is dimeric with a predicted monomeric non glycosylated molecular weight of 39.3 kd.

Transfectant Cell Line: CHO

**INFORMATION:** Human CD27 is a lymphocyte specific member of the tumor necrosis factor receptor family (TNFRSF7) and is found primarily on peripheral blood T cells and on a subpopulation of B cells and NK cells. The ligand for CD27 is CD70, which is a member of the TNF ligand superfamily(TNFSF7). The CD27-CD70 interaction plays an important role in T cell activation.

Recombinant soluble CD27-muIg binds to cell surface CD70 on Raji cells in FACS, and is reactive with recombinant CD70muCD8 (cat #537-020), and anti-CD27 mAb clone M-T271 (cat #176-020).

References: 1) Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) p. 350-352. 2) K. Agematsu, et al. (1994) J Immunol 153(4): 1421-1429. 3) R.Q. Hintzen, et al. (1994) Immunol Today 15: 307-311. 4) Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 356-360, 435-437. 5) K. Agematsu, et al, (1995) J Immunol 154: 3627-3635.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/Thawing is not recommended.

PRODUCT STABILITY: Product should retain activity for at least 6 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 0.1 µm filtered and vialed under aseptic conditions.

PRODUCTION: Human CD27-muIg fusion protein was Protein A purified from (low FBS containing) tissue culture supernatant of CHO transfectants.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured human **Raji** cells were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of CD27-muIg 20 µg/ml. Cells were washed twice and incubated with 2º 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  $0.4 \log_{10}$  fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration. Binding was partially blocked when reagent was pre incubated with a 2.5-fold excess (mg/mg) of recombinant soluble CD70-muCD8 (cat #537-020).

\*This Product is intended for Laboratory Research use only. Ancell Corporation P.O. Box 87 243 Third Street North Phone: Toll free 800-374-9523 or 651-439-0835 Fax: 651-439-1940

## Binding of Recombinant CD27-mulg +GAM/FITC to human Raji cells



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