For maximal recovery of contents please quick spin vial before opening

## Human CD27-muIg/Biotin Fusion Protein\*

CATALOG#: 543-030 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:

 $(11) kscperhywaqgklccqmcepgtflykdcdqhrkaaqcdpcipgysfspdhhtrphcescrhcnsgllyrnctitanaecacrngwqcrdkectecdplpnps \\ (113)$ 

linker (114)gt(115)

murine IgG2a Fc + hinge regions: (116)

eprgptik pcppckcpapnllggpsv fif ppkik dvlmisl spivt cvvv dv seddpd v qiswfvnn vevhtaqt qthredyn stlrvv salpiqh qdwm sgkefkck vnn kdlpapier tisk pkg svrap qvyvlpppeeemtkkqvtltcmvtdfmpediyvewtnngktelnykntepvldsdgsyfmysklrvekknwvernsyscsvvhegllnnhhttksfsrtpgk (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 CD70-muCD8 (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<sup>o</sup>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:\_

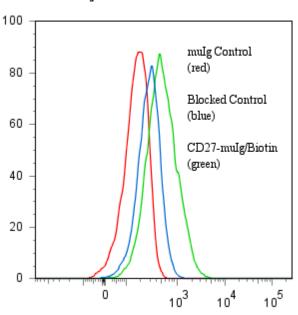
BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

PRODUCTION: Human CD27-muIg fusion protein was Protein A purified from (low FBS containing) tissue culture supernatant of CHO transfectants, and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate by desalting column.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured human **Raji** cells were washed and pre incubated 5 minutes with 20 µl of 300 µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of CD27muIg/Biotin 10 μg/ml. Cells were washed twice and incubated with 20 reagent Streptavidin/R-PE (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **0.56** log<sub>10</sub> fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration. Binding was blocked when reagent was pre incubated with a 5-fold excess (mg/mg) of recombinant soluble CD70-muCD8 (cat #537-020).

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

## Binding of CD27-muIg/Biotin +SA/PE to human Raji cells



Ancell Corporation P.O. Box 87 243 Third Street North Phone: Toll free 800-374-9523 or 651-439-0835 Fax: 651-439-1940

Bayport, MN 55003-0087 USA