

# PERFORMANCE DATA SHEET

1822

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## Human CD27-muIg Fusion Protein\*

CATALOG#: 543-020

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)ksceperhywaqgklccqmcpepgtflvkdcdqhrkaaqcpcipgvsfspdhhtrphcescrhcnsllvrncitanaeacrnwgqcrdkectcdplnps (113)  
linker (114)gt(115)

murine IgG2a Fc + hinge regions: (116)

eprgptikpcppckcpapnllggpsvfifppkikdvlmiskpivtcvvdvseddpdvqiswfvnnvevhtaqtqthredynstlrvsalpiqhqdwmmsgkefkckvnnkdlpapier  
tiskpkgsyrapqvvyvlppeemtkkqvltcmvtdfmpediyvewtnngktelnykntepvltdsdgsyfmysklrvekknwvwnsvsycsvvheglhhhttkfsrtpgk (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°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

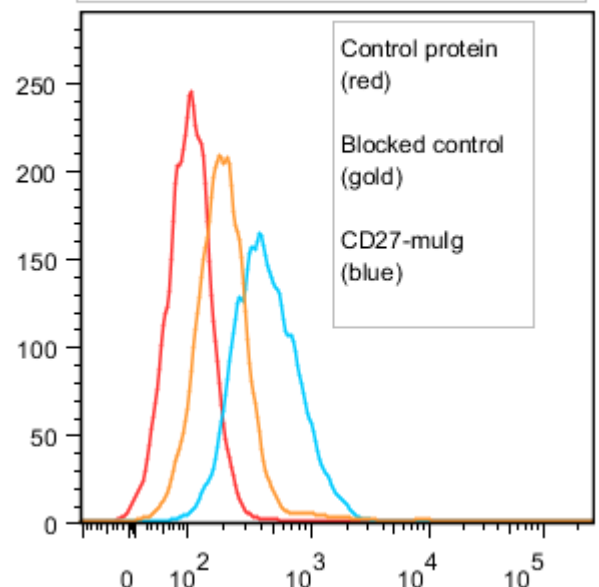
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**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5mg/ml Gentamicin Sulfate (as a preservative).

**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 2<sup>o</sup> 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<sub>10</sub>** fluorescent units when compared to a muIg-Fc negative control (Cat #581-020) at a similar concentration. Binding was blocked when reagent was pre incubated with a 2.5-fold excess (mg/mg) of recombinant soluble CD70-muCD8 (cat #537-020).

**Binding of Recombinant CD27-muIg +GAM/FITC to human Raji cells**



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

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