For maximal recovery of contents please quick spin vial before opening

Human CD70-muCD8/Biotin*

CATALOG#: 537-030 QUANTITY: 25 μg

CONCENTRATION: 0.5 mg/ml

Molecular Structure: A soluble molecule consisting of the extracellular domain (167aa) of murine CD8 alpha fused to 146 (cterm) amino acids of the extracellular domain of human CD70, with a predicted monomeric weight of 34.8 kd..

Transfectant Cell Line: CHO

INFORMATION: Human CD70 (TNFSF7) is the ligand for CD27 (TNFRSF7) and is notably absent on resting lymphocytes. CD70 is expressed after activation on about 20% of T cells and on about 70% of B cells. Recombinant CD70-muCD8 binds to cell surface CD27 on human peripheral blood leukocytes.

References: R.Q. Hintzen, et al, (1994) J Immunol **152**: 1762-1773. M.R. Bowman, et al, (1994) J Immunol **152**: 1756-1761. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 1137-1138. K. Agematsu, et al, (1995) J Immunol **154**: 3627-3635.

STORAGE CONDITIONS: *Store at 2 - 5^oC.* 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% NaN₃ (as a preservative).

PRODUCTION: Fusion protein from (low FBS containing) tissue culture supernatant of transfectants was purified using affinity and size exclusion chromatography), and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

PERFORMANCE: Five x 10⁵ ficoll prepared human **peripheral blood mononuclear 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 CD70-muCD8/Biotin at a concentration of 10 μg/ml. Cells were washed twice and incubated with 2° reagent Streptavidin/R-PE (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. A net **56%** sub population of the cells stained positive with a mean shift of **1.6** log₁₀ fluorescent units when compared to a buffer control. Binding was blocked when reagent was pre incubated with 50μg/ml anti-CD70 antibody (Cat #222-020).

*This Product is intended for Laboratory Research use only.

Binding of CD70-muCD8/Biotin + SA/PE to human ficoll prepared PBMC

