

Human CD134(OX40)-muIg/Biotin Fusion Protein*

CATALOG#: 513-030

QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

Molecular Structure: A soluble molecule consisting of the extracellular (177 aa) domain of human CD134 fused to the murine IgG2a hinge + Fc (233 aa). Predicted monomeric non glycosylated weight is 45.6 kd. Fusion construct is dimeric and runs at about **105 kd** in non reduced SDS-PAGE.

Transfectant Cell Line: CHO

INFORMATION: Human CD134 (OX40) (ACT35) is an activation-associated antigen which is predominantly expressed on activated CD4 positive cells. CD134 antigen is a member of the tumor necrosis factor (TNF) receptor family of molecules and may be involved with regulating T cell-dependent B cell proliferation and differentiation (2). The CD134 costimulatory pathway seems to be more effective for costimulation of CD4+ helper T cells than for CD8+ effector T cells (5). Blockade of this interaction in mouse abrogated immunological effects in several models of inflammation and rejection (6,7,8,9). CD134-muIg fusion protein binds to CD134L on Human Umbilical Cord Endothelial Cells (HUVEC).

REFERENCES: 1) U. Latza, et al, (1994) *Eur J Immunol* 24: 677-683. 2) E. Stuber, et al, (1995) *Immunity* 2: 507-521. 3) Leukocyte Typing IV (W. Knapp, et al, eds.) Oxford University Press, Oxford, (1989) p. 464-465. 4) Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 1157-1160. 5) V.Y. Taraban, et al, (2002) *Eur J. Immunol.* 32: 3617-3627. 6) V. Malmstrom, et al, (2001) *J Immunol* 166: 6972. 7) C. Nohara, et al, (2001) *J Immunol* 166: 2108-2115. 8) X. Yuan, et al, (2003) *J Immunol* 170: 2949-2955. 9) L. Tian, et al, (2002) *Transplantation* 74(1): 133-138.

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, 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 by desalting column.

PERFORMANCE: Five x 10⁵ cultured HUVEC cells per tube were washed and incubated 45 minutes on ice with 80 µl of CD134-muIg/Biotin at a concentration of 5 µg/ml. Cells were washed twice and incubated with 2^o 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 0.45 log₁₀ fluorescent units when compared to a buffer control. Binding was blocked when cells were pre incubated with either 20 ul of 0.5mg/ml anti-CD252 mAb (cat# 400-020) or unlabeled recombinant CD134-muIg (cat# 513-020).

CD134-muIg/Biotin was reactive in EIA using either Goat-anti-mouse-Ig, or anti-CD134 antibody (Catalog #355-020) as a capture reagent, followed by detection using Streptavidin/HRP.

*This Product is intended for Laboratory Research use only.

Binding of CD134-muIg/Biotin +SA/PE to HUVEC

