

## Human CD134(OX40)-muIg Fusion Protein\*

**CATALOG#:** 513-020

**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 7.6, 100mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

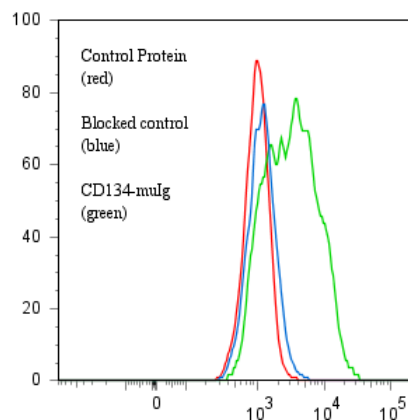
**PRODUCTION:** Fusion protein from (low FBS containing) tissue culture supernatant of transfectants was purified using size exclusion chromatography.

### PERFORMANCE:

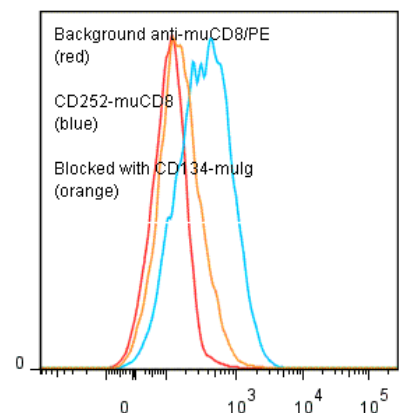
**Indirect binding:** CD134-muIg fusion protein at 5 µg/ml bound to cell surface CD252 on HUVEC detected with GAM/FITC (cat# 232-040). Cells stained positive with a mean shift of **0.62** log<sub>10</sub> fluorescent units.

**Blocking counter ligand:** Pre incubation of recombinant soluble CD252(OX40L)-muCD8 (cat# 512-020) with a 10-fold excess of CD134-muIg blocked binding to human HPB-MLT cells detected by anti-murine CD8/PE (catalog #260-050).

**Binding of CD134-muIg + GAM/FITC to HUVEC**



**Recombinant CD134-muIg blocks binding of Recombinant CD252-muCD8 to human HPB-MLT cells in FACS**



\* **Research Use Only. Not for use in Diagnostic procedures.**