

For maximal recovery of contents please quick spin vial before opening

## Human CD123(IL-3R α)-muIg Fusion Protein\*

CATALOG#: 545-820 (Preservative-free) QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

*Molecular Structure:* A soluble molecule consisting of the extracellular domain of mature human CD123 fused to murine IgG2a Fc. Mature CD123(EC) (307 aa):

tkedpnppitnlrmkakaqqltwdlnrnvtdiecvkdadysmpavnnsycqfgaislcevtnytvrvanppfstwilfpensgkpwagaenltcwihdvdflscswavgpgapadvqydlylnvanrrqqyecl hyktdaqgtrigcrfddisrlssgsqsshilvrgrsaafgipctdkfvvfsqieiltppnmtakcnkthsfmhwkmrshfnrkfryelqiqkrmqpviteqvrdrtsfqllnpgtytvqirarervyeflsawstpqrfec dqeegantrawrtsllialgtllalvcvfvic

Linking amino acids (2aa): gt

Murine IgG2aFc (233aa):

eprgptikpcppckcpapnllggpsvfifppkikdvlmislspivtcvvvdvseddpdvqiswfvnnvevhtaqtqthredynsthrvvsalpiqhqdwmsgkefkckvnnkdlpapiertiskpkgsvrapqvy vlpppeeemtkkqvtltcmvtdfmpediyvewtnngktelnykntepvldsdgsyfmysklrvekknwvernsyscsvvheglhnhhttksfsrtpgk Predicted nonglycosylated monomeric weight: 61.6 kd.

Transfectant Cell Line: CHO

**INFORMATION:** Human CD123 (Interleukan 3 Receptor) is a 70kD type I transmembrane molecule, and is the low affinity receptor for the cytokine IL-3, which can stimulate proliferation or differentiation. When paired in a heterodimer with CD131 (IL-3 R beta), it binds IL-3 with much higher affinity. CD123 is found on Myeloid precusors, Stem cells, a subset of T cells, some B cells Megakaryocytes, basophils, monocytes and epithelial cells. CD123 is present at high levels on many hematologic malignancies and antibodies(2) and CAR T cells(1) against CD123 have been used successfully to combat Acute Myeloid Leukemia.

**References: 1)** Pizzitola I, Bonnet D, et al. (2014) *Leukemia* **28**(8): 1596-1605. doi: 10.1038/leu.2014.62 **2**) Jin L, Lock RB, et al. (2009) *Cell Stem Cell* **5**(1): 31-42. doi: 10.1016/j.stem.2009.04.018.

## 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:\_\_\_\_\_

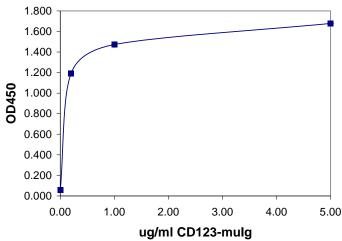
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl. Product was 0.1 µm filtered and vialed under aseptic conditions.

**PRODUCTION:** Human CD123-muIg fusion protein was purified from (low FBS containing) tissue culture supernatant of CHO transfectants using Protein A and size exclusion

chromatography. Product was  $0.2\mu$  sterile filtered and vialed under aseptic conditions.

**PERFORMANCE:** Human CD123-muIg was reactive in EIA utilizing coated recombinant IL-3 capture, detection with GAM/HRP and TMB/H2O2 substrate. Binding was easily observed at 200ng/ml.

\*Research use only. Not for use in Diagnostic procedures.



Binding of CD123-mulg to immobilized

IL-3 with GAM/HRP detection

Ancell Corporation P.O. Box 87 Bayport, MN 55003-0087 USA Phone: Toll free 800-374-9523 or 651-439-0835 Fax: 651-439-1940