

**Recombinant Human Interleukin-3 Receptor
alpha/CD123 Fc Chimera Protein, Insect Cells
Derived
(rHuIL-3R α /CD123-Fc, Insect Cell)
PrimeGene Technical Data Sheet**

Catalog Number:	101-03F
Source:	<i>Insect Cell</i>
Molecular Weight:	Approximately 60.3 kDa on SDS-PAGE under reducing conditions, containing 529 amino acids.
Quantity:	10 μ g/100 μ g
AA Sequence:	AGMGTKEDPN PPITNLRMKA KAQQLTWDLN RNVTDIECVK DADYSMPAVN NSYCQFGAIS LCEVTNYTVR VANPPFSTWI LFPENSGKPW AGAENLTCWI HDVDFLSCSW AVGPGAPADV QYDLYLVAN RRQQYECLHY KTDAQGTRIG CRFDDISRLS SGSQSSHILV RGRSAAFVIP CTDKFFVFSQ IEILTPPNT AKCNKTHSFM HWKMRSHFNR KFRYELQIQK RMQPVITEQV RDRTSFQLLN PGTYTVQIRA RERVYEFLSA WSTPQRFECQ QEEGANTRAW RIEGRMDEPK SSDKTHTCPP CPAPEFEGAP SVFLFPPKPK DTLMISRTPE VTCVVVDVSH EDPEVKFNWY VDGVEVHNAK TKPREEQYNS TYRVVSVLTV LHQDWLNGKE YKCKVSNKAL PTPIEKTISK AKGQPREPQV YTLPPSRDEL TKNQVSLTCL VKGFYPSDIA VEWESNGQPE NNYKTPPVV DSDGSFFLYS KLTVDKSRWQ QGNVFCSSVM HEALHNHYTQ KSLSLSPGK
Purity:	> 95 % by SDS-PAGE analyses.
Biological Activity:	Testing in progress.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.0, with 0.02 % Tween-20.
Endotoxin:	Less than 0.01 EU/ μ g of rHuIL-3 R α /CD123-Fc as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 $^{\circ}$ C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 $^{\circ}$C as supplied.● 1 month, 2 to 8 $^{\circ}$C under sterile conditions after reconstitution.● 3 months, -20 to -70 $^{\circ}$C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Interleukin-3 Receptor alpha/CD123

Interleukin-3 receptor (IL-3 R) is a heterodimeric structure composed of a 70 kDa IL-3 R alpha subunit (IL-3 R α or CD123) and a 120-140 kDa IL-3 R beta subunit (IL-3 R β or CD131). IL-3R α is a glycoprotein member of the hematopoietic receptor superfamily. IL-3 R α binds IL-3 with relatively low affinity. In the presence of IL-3 R β , however, IL-3 R alpha has a much higher affinity for IL-3.

Emerging studies demonstrate that CD123, the IL-3 R α , is highly expressed in leukemic stem cells (LSCs), while not normal hematopoietic stem cells (HSCs), and associates with treatment response, minimal residual disease (MRD) detection and prognosis. Furthermore, CD123 is an important marker for the identification and targeting of LSCs for refractory or relapsed leukemia.