

PrimeGene Technical Data Sheet

Catalog Number:	101-13
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 12.5 kDa, a single non-glycosylated polypeptide chain containing 112 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	GPVPPSTALR ELIEELVNIT QNQKAPLCNG SMVWSINLTA GMYCAALES� INVSGCSAIE KTQRMLSGFC PHKVSAGQFS SLHVRDTKIE VAQFVKDLLL HLKCLFREGR FN
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using human TF-1 cells is less than 1 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁶ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4 with 5 % trehalose.
Endotoxin:	Less than 1 EU/µg of rHuIL-13 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 20 mM HCl to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °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 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °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-13

Human Interleukin-13 (IL-13) is expressed by the IL13 gene located on the chromosome 5 and secreted by many cell types, especially T helper type 2 (Th2) cells. The high resolution structure of IL-13 reported to be a monomer with two internal disulfide bonds that contribute to a bundled four α -helix configuration. Targeted deletion of IL-13 in mice resulted in impaired Th2 cell development and indicated an important role for IL-13 in the expulsion of gastrointestinal parasites. IL-13 exerts anti-inflammatory effects on monocytes and macrophages and it inhibits the expression of inflammatory cytokines such as IL-1 β , TNF- α , IL-6 and IL-8. IL-13 has also been shown to enhance B cell proliferation and to induce isotype switching resulting in increased production of IgE. Human, mouse and rat IL-13 share low homology, but have cross species activity.