

GMP Recombinant Human IL21 protein

Cat. No. IL21-4334HG Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL21 protein was expressed in Escherichia coli. This product is produced under cGMP guidelines.
Species	Human
Source	E.coli
ProteinLength	133
Description	Human IL-21 is encoded by IL-21 gene located on Chr. 4. It is a pleiotropic cytokine produced by CD4+ T cells in response to antigenic stimulation and can regulating immune system cells, for instance cytotoxin T cells and natural killer cells. Additionally, it can induce target cells division or proliferation. IL-21 elicits its effect through binding to IL-21R, which also contains the gamma chain found in other cytokine receptors such as IL-2, IL-4, IL-7, IL-9 and IL-15. IL-21/IL-21R interaction triggers a cascade of events which includes activation of the tyrosine kinases JAK1 and JAK3, followed by activation of the transcription factors STAT1 and STAT3. IL-21 shows having much relation with clinical illnesses, including cancer immunotherapy, viral infections and allergies.
Form	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human N1186 T cells is less than 20 ng/ml, corresponding to a specific activity of > 5.0 ×

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	10 ⁴ IU/mg.
Molecular Mass	Approximately 15.4 kDa, a single non-glycosylated polypeptide chain containing 133 amino acids.
AA Sequence	QGQDRHMIRMRLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSAFSCFQKAQLK SANTGNNERIINVSIIKKLKRKPPSTNAGRQKHRLTCPSCDSYEKKPPKEFLERFKSL LQKMIHQHLSSRTHGSEDS
Endotoxin	Less than 0.01 EU/g of rHuIL-21 GMP as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 0.1-0.5 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	IL21
Official Symbol	IL21
Synonyms	IL21; interleukin 21; interleukin-21; IL 21; Za11; interleukin-21 isoform; IL-21;

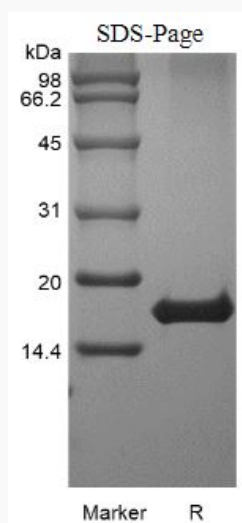
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Gene ID	59067
mRNA Refseq	NM_001207006
Protein Refseq	NP_001193935
MIM	605384
UniProt ID	Q9HBE4

SDS-PAGE of IL21-4334HG



**HPLC of IL21-
4334HG**

