

Recombinant Human interleukin 21 Protein, Tag Free, Animal Free

Cat. No. IL21-05H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human IL-21 (30-162aa) without tag was expressed in E. coli and purified by using conventional chromatography techniques. Produced using non-animal reagents in an animal-free laboratory.
Species	Human
Source	E.coli
ProteinLength	30-162aa
Description	This gene encodes a member of the common-gamma chain family of cytokines with immunoregulatory activity. The encoded protein plays a role in both the innate and adaptive immune responses by inducing the differentiation, proliferation and activity of multiple target cells including macrophages, natural killer cells, B cells and cytotoxic T cells. Dysregulation of this gene plays a role in multiple immune-mediated diseases including lupus, psoriasis and chronic inflammatory diseases. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.
Tag	Non
Form	Liquid
Bio-activity	The activity is determined by the IFN- γ ELISA in a using NK-92 human natural killer cells. The ED50 range ≤ 4 ng/mL.

 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

Molecular Mass	15.5 kDa
AA Sequence	MQGQDRHMIRMRLIDIVDQLKNYVNDLVPEFLPAPEDVETNCEWSAFSCFQKAQL KSANGNNERIINVSIIKKLKRKPPSTNAGRQKHRLTCPSCDSYEKKPPKEFLERFKSL LQKMIHQHLSSRTHGSEDS
Endotoxin	< 1 EU/μg of protein (determined by LAL method)
Purity	> 95% by SDS-PAGE
Applications	SDS-PAGE, Bioactivity
Notes	For research use only. This product is not intended or approved for human, diagnostics or veterinary use.
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.
Storage Buffer	Phosphate-Buffered Saline (pH 7.4)
Concentration	0.25 mg/mL (determined by absorbance at 280nm)
References	1. Gui G., et al. (2017) Clin Immunol. 183:266-272. 2. Parrish-Novak J., et al. (2000) Nature. 408(6808):57-63.

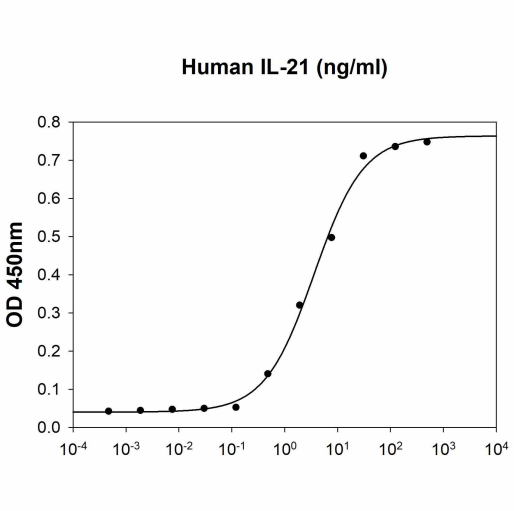
GENE INFORMATION

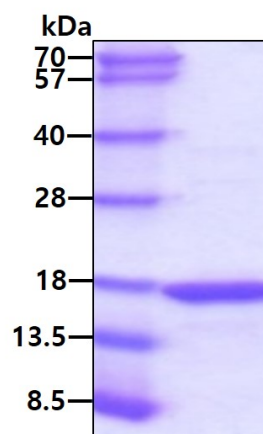
Gene Name	IL21 interleukin 21 [Homo sapiens (human)]
Official Symbol	IL21

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Synonyms	IL21; interleukin 21; Za11; IL-21; CVID11; interleukin-21																				
Gene ID	59067																				
mRNA Refseq	NM_021803																				
Protein Refseq	NP_068575																				
MIM	605384																				
UniProt ID	Q9HBE4																				
Activity	 <table border="1"> <caption>Approximate data points from the Human IL-21 dose-response curve</caption> <thead> <tr> <th>Human IL-21 (ng/ml)</th> <th>OD 450nm</th> </tr> </thead> <tbody> <tr><td>10⁻⁴</td><td>0.05</td></tr> <tr><td>10⁻³</td><td>0.05</td></tr> <tr><td>10⁻²</td><td>0.05</td></tr> <tr><td>10⁻¹</td><td>0.05</td></tr> <tr><td>10⁰</td><td>0.15</td></tr> <tr><td>10¹</td><td>0.50</td></tr> <tr><td>10²</td><td>0.72</td></tr> <tr><td>10³</td><td>0.75</td></tr> <tr><td>10⁴</td><td>0.75</td></tr> </tbody> </table> Human IL-21 stimulates IFN-γ secretion of the NK-92 human natural killer cells. The ED50 range $\leq$ 4 ng/mL.	Human IL-21 (ng/ml)	OD 450nm	10 ⁻⁴	0.05	10 ⁻³	0.05	10 ⁻²	0.05	10 ⁻¹	0.05	10 ⁰	0.15	10 ¹	0.50	10 ²	0.72	10 ³	0.75	10 ⁴	0.75
Human IL-21 (ng/ml)	OD 450nm																				
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SDS-PAGE

3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

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