

Recombinant Human Interleukin 22, HQ-tagged

Cat. No. IL22-637H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanIL22 contains 146 amino acids and a 16 aa HQ tag. Total length is 162 aa.
Species	Human
Source	Hordeum Vulgare
Description	IL22 is proteinthat in humans is encoded by the IL22 gene. IL22 a member of a group ofcytokines called the IL-10 family or IL-10 superfamily (including IL-19,IL-20, IL-24, and IL-26), a class of potent mediators of cellularinflammatory responses. It shares use of IL-10R2 in cell signaling with othermembers of this family, IL-10, IL-26, IL-28A/B and IL-29. IL22 is produced byactivated DC and T cells and initiates innate immune responses againstbacterial pathogens especially in epithelial cells such as respiratory andgut epithelial cells. IL22 along with IL-17 is rapidly produced by splenicLTi-like cells and can be also produced by Th17 cells and likely plays a rolein the coordinated response of both adaptive and innate immune systems.
Form	Lyophilized from a0.2 µ sterile filtered solution of PBS, pH 7.2.
Molecular Weight	18.9 kDa includingHQ tag. The glycosylated IL22 migrates as 3 bands with an apparent MW = 22,24, 26 kDa in SDS-PAGE.
Purity	>98% by SDS-PAGE.Purified product carries no pyrogenic or pro-inflammatory contaminants, asassayed with monocyte activation test using custom human Multiplex CytokineAssay measuring IL-6, TNF-alpha and IL-1beta induction.

 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

Endotoxin Level	< 0.005 ng perg of product (0.05 EU/g) as measured by turbidimetric kinetic assay.
Biological Activity	Bioactivity is assayed by measuring the dose dependent effect of human IL22 on proliferation of Ba/F3 cells transfected with mouse IL22 receptor. The ED50 for a typical batch of recombinant human IL22 is 2.2 ng/ml.
Reconstitution	Centrifuge vial prior to opening. Reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml.
Storage	The lyophilized protein, though stable at room temperature for two weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.
Official Symbol	IL22

GENE INFORMATION

Gene Name	IL22 interleukin 22 [Homo sapiens]
Synonyms	IL22; interleukin22; TIFa; IL-21; IL21; IL-22; ILTIF; IL-TIF; IL-D110; zcyto18; ZCYTO18; MGC79382; MGC79384; TIFIL-23; interleukin-22; interleukin 21; cytokine Zcyto18; Cytokine Zcyto18; OTTHUMP00000240117; IL-10-related T-cell-derived inducible factor; IL-10-related T-cell-derived-inducible factor
Gene ID	50616
mRNA Refseq	NM_020525
Protein Refseq	NP_065386
MIM	605330

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UniProt ID	Q9GZX6
Chromosome Location	12q15
Pathway	Cytokine-cytokinereceptor interaction; Jak-STAT signaling pathway
Function	cytokine activity;interleukin-22 receptor binding
Crystallographic structure of IL-22 (rainbow colored, N-terminus = blue, C-terminus = red) complexed with the IL-22R1 (magenta).	

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