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 μm 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.

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

GENE INFORMATION

Gene Name	IL22 interleukin 22 [Homosapiens]
Synonyms	IL22; interleukin22; TIFa; IL-21; IL21; IL-22; ILTIF; IL-TIF; IL-D110; zcyto18; ZCYTO18;MGC79382; MGC79384; TIFIL-23; interleukin-22; interleukin 21; cytokineZcyto18; Cytokine Zcyto18; OTTHUMP00000240117; IL-10-related T-cell-derivedinducible 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
Crystallographicstructu of IL-22 (rainbow colored, N-terminus = blue, C-terminus = red)complexed with the IL-22R1 (magenta).	

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