

Active GMP Recombinant Human IL17A protein

Cat. No. IL17A-4331HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL17A was produced in E. coli using non-animal reagents in an animal-free facility under cGMP guidelines.
Species	Human
Source	E.coli
Description	Human Interleukin-17A (IL-17A) is encoded by the IL17A gene located on the chromosome 6 and belongs to the IL-17 family that contains IL-17A, IL-17B, IL-17C, IL-17D, IL-17E and IL-17F. They have a similar protein structure, with four highly conserved cysteine residues critical to their 3-dimensional shape, but no sequence similarity to any other known cytokines. Interleukin 17 is a T cell-expressed pleiotropic cytokine that exhibits a high degree of homology to a protein encoded by the ORF13 gene of herpesvirus Saimiri. Mature IL-17 containing one potential N-linked glycosylation site. Both recombinant and natural IL-17 have been shown to exist as disulfide linked homodimers. At the amino acid level, IL-17 exhibits 63 % amino acid identity with mouse IL-17. High levels of human IL-17 were induced from primary peripheral blood CD4+ T cells upon stimulation and they can induce stromal cells to produce proinflammatory and hematopoietic cytokines.
Form	Lyophilized from a 0.2 µ filtered concentrated solution in PBS, pH 7.4.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by inducing IL-6 secretion of murine NIH/3T3 cells is less than 7.5 ng/ml, corresponding

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	to a specific activity of $> 1.3 \times 10^5$ IU/mg.
Molecular Mass	Approximately 31.0 kDa, a disulfide-linked homodimer of two 132 amino acid polypeptide chains.
AA Sequence	GITIPRNPGCPNSEDKNFPRTVMVNLNIHNRNTNTNPKRSSDYYNRSTSPWNLHRN EDPERYPSVIWEAKCRHLGCINADGNVDYHMNSVPIQQEILVLRREPPHCPNSFRLE KILVSVGCTCVTPIVHHVA
Endotoxin	Less than 1 EU/g of rHuIL-17 as determined by LAL method.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Storage	This lyophilized preparation is stable at 2-8 centigrade, but should be kept at -20 centigrade for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 centigrade. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 centigrade to -70 centigrade. Avoid repeated freeze/thaw cycles.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 centigrade. Further dilutions should be made in appropriate buffered solutions.
Quality Statement	Our GMP proteins are produced according to relevant sections of the following documents: WHO TRS, No. 822, 1992 Annex 1, Good Manufacturing Practices for Biological Products; USP Chapter 1043, Ancillary Materials for Cell, Gene and Tissue-Engineered Products and USP Chapter 92, Growth Factors and Cytokines Used in Cell Therapy Manufacturing.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

GENE INFORMATION

Gene Name IL17A interleukin 17A [Homo sapiens]

Official Symbol IL17A

Synonyms

IL17; CTLA8; IL-17; IL-17A; interleukin-17A; CTLA-8; cytotoxic T-lymphocyte-associated antigen 8; cytotoxic T-lymphocyte-associated protein 8; interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8)

Gene ID 3605

mRNA Refseq NM_002190

Protein Refseq NP_002181

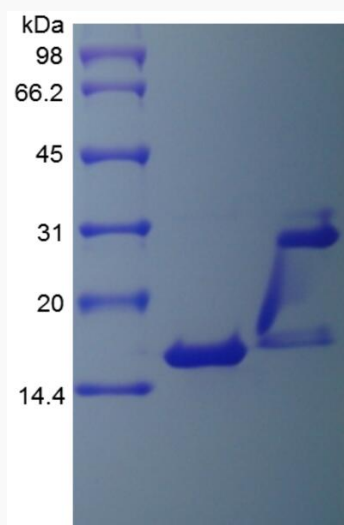
MIM 603149

UniProt ID Q16552

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