

## Recombinant Human Interleukin-17A (rh IL-17A)

**Synonyms:** IL-17, Cytotoxic T-lymphocyte-associated antigen 8 (CTLA-8).

**Introduction:** IL-17 is a proinflammatory cytokine produced by activated T cells. IL-17 regulates the activities of NF-kappaB and mitogen-activated protein kinases. IL-17 can stimulate the expression of IL-6 and Cyclooxygenase-2 (COX-2) as well as enhance the production of nitric oxide (NO). High levels of IL-17 are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis.

**Description:** Recombinant human IL-17A produced in *E.Coli* is a homodimeric, non-glycosylated polypeptide chain containing a total of 264 amino acids and having a molecular mass of 30.25 kDa. The rh IL-17A is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.22 µm filtered solution in 25 mM sodium phosphate, 200 mM NaCl, pH 7.4. The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh IL-17A in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh IL-17A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-17A should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSS or BSA). Please prevent freeze-thaw cycles.

**Purity:** 95.0% as determined by SDS-PAGE silver stained gel.

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method

**Amino Acid Sequence:** MIVKAGITIP RNP GCPNSEDKNFPRTVMVN LNIHNRNTNT NPKRSSDYNN  
RSTSPWNLHR NEDPERYPSV IWEAKCRHLG CINADGNVDY HMNSVPIQQE ILVLRREPPH  
CPNSFRLEKI LVS VGCTCVT PIVHHVA

**Biological Activity:** The biological activity of rec. human IL-17A was tested by dose dependant stimulation of IL-6 secretion on human fibroblasts. The specific activity is  $\geq 5 \times 10^5$  IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11340170
<i>medium</i>	25 µg	Cat.N°	11340174
<i>large</i>	100 µg	Cat.N°	11340176
<i>x-large</i>	500 µg	Cat.N°	11340177

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