

## Recombinant Murine Interleukin-17A (rm IL-17A)

**Synonyms:** 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. Interleukin-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 murine IL-17A produced in *E.Coli* is a homodimeric, non-glycosylated polypeptide chain containing a total of 266 amino acids and having a molecular mass of 29956 Dalton. The rm IL-17A is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** The protein was lyophilized from a concentrated (1 mg/ml) solution in PBS, pH 7.4. The sample size of 1µg contains Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm 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 rm IL-17A although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rm 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% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

**Endotoxicity:** The endotoxin level is less than 1 EU/mg (0.1 ng/ml) determined by LAL method

**Amino acid sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Ala-Ile-Ile-Pro.

**Biological Activity:** rm IL-17A is fully biologically active when compared to standard. The ED<sub>50</sub> as determined by the dose-dependant secretion of IL-6 by NIH 3T3 cells was found to be 1.0-10.0 ng/ml.

This material is offered for **research 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° | 12340170 |
| <i>medium</i>  | 25 µg  | Cat.N° | 12340174 |
| <i>large</i>   | 100 µg | Cat.N° | 12340176 |
| <i>x-large</i> | 500 µg | Cat.N° | 12340177 |

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Gladiolenweg 2; 26169 Friesoythe; Germany  
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)