

## Recombinant Equine Interleukin-1 alpha (req IL-1a/IL1F1)

**Synonyms:** Hematopoietin-1, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF)

**Introduction:** IL-1 alpha is produced by activated macrophages, stimulates thymocyte proliferation by inducing IL-2 release, b- cell maturation and proliferation and fibroblast growth factor activity. IL1A proteins are involved in the inflammatory response, being identified as endogenous pyrogens and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

**Description:** Recombinant equine IL-1alpha produced in *E.Coli* is a non-glycosylated, polypeptide chain containing 159 amino acids and having a molecular mass of 18230 Dalton. The req IL-1alpha is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** lyophilized from a concentrated (1 mg/ml) sterile solution containing PBS, pH 7,4.

**Solubility:** It is recommended to reconstitute the lyophilized req IL-1alpha 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 req IL-1alpha although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution req IL-1alpha 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 98.0% as determined by SDS-PAGE.

**Amino acid sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Val-His-Tyr-Asn.

**Biological Activity:**

The ED<sub>50</sub> as determined by the dose-dependant stimulation of murine D10S cells is 15 pg/ml.

**Endotoxicity:** The endotoxin level is less than 1ng /µg (IEU/µg) determined by LAL method

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>	2 µg	Cat.N°	18349012
<i>medium</i>	10 µg	Cat.N°	18349013
<i>large</i>	50 µg	Cat.N°	18434015
<i>x-large</i>	250 µg	Cat.N°	18459017

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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)