

Human IL-1α research grade

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1. Description

Products Human IL-1α, research grade.

Recombinant human interleukin 1a.

Content in µg	Order no.
2	130-093-893
10	130-093-894

Biological activity

The ED₅₀ is \leq 0.001 ng/mL corresponding to an

activity of ≥1×10° U/mg.

▲ Note: The ED₅₀ was determined by dose-dependent stimulation of the proliferation of mouse D10S cells.

Primary structure

Single, non-glycosylated polypeptide chain

(159 amino acid residues).

Molecular mass

18.0 kDa.

Source

Produced in E. coli.

Product format

Lyophilized from a filtered (0.2 µm) buffer

solution.

Stabilizer

None.

Purity

>97% as determined by SDS-PAGE analysis.

Endotoxin level

Low endotoxin (<1.0 EU/μg cytokine) as determined by Limulus Amebocyte Lysate

(LAL) assay.

Storage

Lyophilized Human IL-1α, research grade should be stored at -20 °C. The expiration date is indicated on the vial label. Upon reconstitution aliquots should be stored at -20 °C or below. Avoid repeated freeze-thaw cycles.

Reconstitution

It is recommended to reconstitute lyophilized Human IL-1 α , research grade with deionized sterile-filtered water to a final concentration of 0.1–1.0 mg/mL in a minimal volume of 20 μ L. Further dilutions should be prepared with 0.1% bovine serum albumin (BSA) or human serum albumin (HSA) in phosphate-buffered

saline.

1.1 Background information

Interleukin 1 alpha (IL- 1α) is a cytokine that participates in the regulation of immune responses, inflammatory reactions, and hematopoiesis. IL- 1α is produced mainly by activated macrophages as well as neutrophils, epithelial cells, and endothelial cells. It is involved in lymphocyte proliferation, inducing IL-2 release, B cell

maturation and proliferation, and immunoglobulin secretion. In addition, it also plays a role in fibroblasts proliferation.

1.2 Applications

Human IL-1 α can be used for a variety of applications including:

- Proliferation of lymphocytes.
- Chemotaxis assays.
- Investigation of IL-1 receptor signaling.

Optimal concentration for a specific application should be determined by a dose-response experiment.

Refer to www.miltenyibiotec.com for all data sheets and protocols. Miltenyi Biotec provides technical support worldwide. Visit www. miltenyibiotec.com/local to find your nearest Miltenyi Biotec contact.

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