

Recombinant Rat Interleukin-1 alpha

#R00296

Size: 10 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Interleukin-1 alpha (IL-1α) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1α and IL-1β binds to the same receptor and has similar but not identical biological properties. Recombinant rat IL-1 alpha contains 150 amino acids which is a single non-glycosylated polypeptide.

AA Sequence

SAPHSFQNNLRYKLIRIVKQEFIMNDSLQNQNIYVDMD
RIHLKAASLNDLQLEVKFDMYAYSSGGDDSKYPVTLK
VSNTQLFVSAQGEDKPVLLKEIPETPKLITGSETDLIFF
WEKINSKNYFTSAAFPELLIATKEQSQVHLARGLP
SMIDFQIS

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Accession	P16598
GeneID	24493
Species	Rat
Source	Escherichia coli.
Molecular Weight	Approximately 17.8 kDa, a single non-glycosylated polypeptide chain containing 156 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 0.005 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁸ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 150 mM NaCl, pH 8.5.
Endotoxin	Less than 1 EU/µg of rRtIL-1α as determined by LAL method.
