



SHANGHAI GENOMICS

Recombinant Human Interleukin 1 alpha

rHuIL-1 α

Catalog number: SG3110-50

Specifications and Use

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| Source | <ul style="list-style-type: none">● <i>Escherichia coli</i>. |
| Molecular Mass | <ul style="list-style-type: none">● 18Da |
| Purity | <ul style="list-style-type: none">● Greater than 95% by SDS-PAGE analyses. |
| Biological Activity | <ul style="list-style-type: none">● The ED50 as determined by the dose-dependent stimulation of murine D10g4.1 cells is < 0.001 ng/ml, corresponding to a specific activity of > 1 x 10⁹ units/mg. |
| Endotoxin Level | <ul style="list-style-type: none">● Less than 1EU/μg as determined by LAL method. |
| Formulation | <ul style="list-style-type: none">● Sterile filtered lyophilized (freeze-dried) powder, with 20mM Tris-HCl, 50 mM NaCl, 2mM CaCl₂, pH8.0 |
| Solubility | <ul style="list-style-type: none">●● It is recommended to reconstitute the lyophilized rHuIL-1 alpha in sterile ddH₂O containing at least 0.1% human serum albumin or bovine serum albumin to prepare a stock solution of no less than 1mg/ml of the cytokine. |
| Stability | <ul style="list-style-type: none">● The lyophilized protein is stable for a few weeks at room temperature, but best stored at -20°C.● Reconstituted human IL-1α should be stored in working aliquots at -20°C. |
| Usage | <ul style="list-style-type: none">● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE. |

Human Interleukin 1 α

IL-1 α is a non-secreted proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 α and IL-1 β binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1 β is a secreted cytokine, IL-1 α is predominantly a cell-associated cytokine. Recombinant human IL-1 α is an 18.0 kDa protein containing 159 amino acid residues.