

## Recombinant Human IL-1a

Catalog No: C070

<b>Description</b>	Recombinant Human Interleukin-1 alpha is produced by our E.coli expression system and the target gene encoding Ser113-Ala271 is expressed.
<b>Source</b>	E. coli
<b>Alternative name</b>	Interleukin-1 Alpha; IL-1 Alpha; Hematopoietin-1; IL1A; IL1F1
<b>Accession No.</b>	P01583
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, pH 7.5.
<b>Quality Control</b>	<p>Bioactivity* Measured by its ability to induce NFκB reporter gene expression in HEK 293 cell line. The ED50 for this effect is typically 12pg/mL.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg).</p>
<b>Reconstitution</b>	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100µg/mL.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
<b>Shipping</b>	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
<b>Storage</b>	<p>Lyophilized protein should be stored at &lt; -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at &lt; -20°C for 3 months.</p>
<b>Amino Acid Sequence</b>	<p>SAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIRANDQYLTAALHNLDEAVKFDMGAYKSSKDDAKITV</p> <p>ILRISKTKQLYVTAQDED</p> <p>QPVLLKEMPEIPKTITGSETNLLFFWETHGKKNYFTSVAHPNLFIA TKQDYWVCLAGGPPSITDFQILE</p> <p>NQA</p>
<b>Background</b>	<p>Interleukin-1 alpha (IL1α) is a cytokine member of the interleukin-1 family. IL-1 consists of two distinct forms: IL1α and IL1β that recognize the same cell surface receptors but are distinct proteins with approximately 25% amino acid sequence identity. IL1α is constitutively produced by epithelial cells and plays an essential role in maintenance of skin barrier function. Upon stimulation, a wide variety of cells including osteoblasts, monocytes, macrophages can be induced to express IL1 α. IL1 α possesses a wide range of metabolic, physiological, haematopoietic activities, and is critically involved in the regulation of the immune responses and inflammatory responses.</p>

### SDS-PAGE

