

## Recombinant Human IL-1A/IL-1α Protein

**Catalog Number: PKSH033458**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

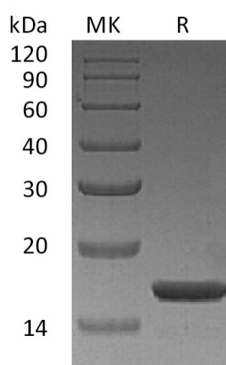
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human IL-1A/IL-1α protein Ser113-Ala271, with an C-terminal His
<b>Calculated MW</b>	19 kDa
<b>Observed MW</b>	17 kDa
<b>Accession</b>	P01583
<b>Bio-activity</b>	Measure by its ability to induce D10.G4.1 cells proliferation. The ED <sub>50</sub> for this effect is <10 pg/mL. The specific activity of recombinant human IL-1 alpha is approximately >1x10 <sup>8</sup> IU/ mg.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 98 % as determined by reducing SDS-PAGE.

### Background

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 IL1α. IL1α possesses a wide range of metabolic, physiological, haematopoietic activities, and is critically involved in the regulation of the immune responses and inflammatory responses.

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