

Recombinant Human IL-1A/IL-1α Protein

Catalog Number: PKSH033458

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

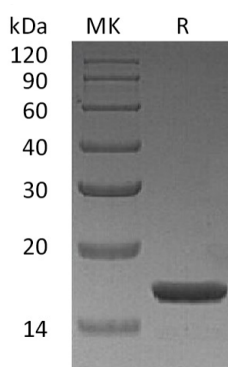
Description

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

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	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.
Reconstitution	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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