

Datasheet for ABIN6699986

IL1A Protein**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	IL1A
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Interleukin-1-alpha Recombinant Protein
Purification:	Interleukin-1-alpha purity was determined to be greater than 97% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Purity:	97,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the stimulation of D10S.G4.1 cells and is typically 1-6 pg/mL.

Target Details

Target:	IL1A
Alternative Name:	IL1A (IL1A Products)
Background:	Synonyms: IL-1F1, FAF, BAF, LEM, LAF, Hematopoietin-1 Background: Interleukin-1 alpha (IL-1 α) is constitutively expressed by epithelial cells, but can also be produced by most other cells upon stimulation. IL-1 β and IL-1 α are two distinct and

Target Details

independently regulated gene products that comprise IL-1 and signal through the Type 1 IL-1 receptor (IL-1R1). Although IL-1 α is cell associated and IL-1 β is secreted, they have nearly identical biological activity in that they induce adhesion molecule expression on epithelial cells, control fever induction, and play a role in arthritis and septic shock. Signaling activated by the IL-1R1 promotes these activities through a MYD88 signaling pathway similar to those associated with Toll receptors. Recombinant human IL-1 α is a non-glycosylated single chain protein, containing 159 amino acids, with a molecular weight of 18 kDa.

UniProt: [P01583](#)

Pathways: [NF-kappaB Signaling](#), [Autophagy](#), [Cancer Immune Checkpoints](#)

Application Details

Application Notes: Other: User Optimized
Application_Note: Interleukin-1-alpha Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-1-alpha in immunological assays.

Comment: Suggested_Applications: Cellular Assay
Other_Performance_Data:

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution_Buffer: Restore with deionized water (or equivalent)
Reconstitution_Volume: 100 μ L

Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5
Stabilizer: None

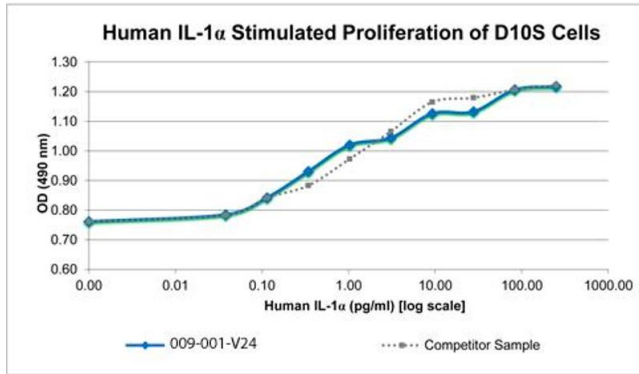
Preservative: Without preservative

Storage: 4 $^{\circ}$ C, -20 $^{\circ}$ C

Storage Comment: Store vial at 4 $^{\circ}$ C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20 $^{\circ}$ C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing

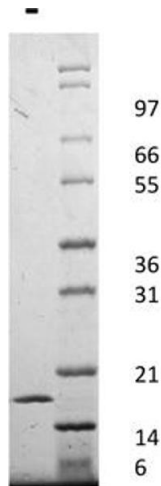
at room temperature.

Expiry Date: 6 months



SDS-PAGE

Image 1. SDS-PAGE of Human Interleukin-1-alpha Recombinant Protein Bioactivity of Human Interleukin-1-alpha Recombinant Protein. Serial dilutions of Human IL-1α (starting at 250 pg/mL) were added to D10S cells. After 42 hours, cell proliferation was measured and the linear portion of the curve was used to calculate the ED50. The ED50 of Human IL-1α is between 0.6-0.8 pg/mL. This value is comparable to the typical expected range of 1-6 pg/mL.



SDS-PAGE

Image 2. SDS-PAGE of Human Interleukin-1-alpha Recombinant Protein SDS-PAGE Human Interleukin-1-alpha Recombinant Protein. Lane 1: 1 µg Human IL-1-alpha in non-reducing conditions. Lane 2: Molecular weight marker. Human IL-1-alpha has a predicted MW of 18 kDa.