

## Synonym

IL1F7,IL37,FIL1Z,IL1H4,IL1RP1

# Source

Human IL-37, His Tag (ILB-H51H5) is expressed from E.coli cells. It contains AA Lys 27 - Asp 192 (Accession # Q9NZH6-2).

#### **Molecular Characterization**

IL-37(Lys 27 - Asp 192) Q9NZH6-2

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 20.1 kDa. The protein migrates as 20-23 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

## **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, 1 mM TCEP, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

## **Storage**

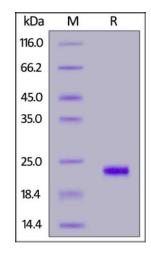
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human IL-37, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

# Background

Interleukin-1 family member 7 (IL1F7b), a member of the IL-1 family, is aslo known as interleukin-37, interleukin-1 homolog 4 (IL-1H4), interleukin-1 zeta (IL-1 zeta) and interleukin-1-related protein, which can interact with SMAD3 and bind to IL18R1, but not to IL1R1, with lower affinity than IL18. IL1F7b is a suppressor of innate inflammatory and immune responses involved in curbing excessive inflammation. This function requires SMAD3. Therefore,IL1F7b can suppress, or reduce, proinflammatory cytokine production, including IL1A and IL6, as well as CCL12, CSF1, CSF2, CXCL13, IL1B, IL23A and IL1RN, but spare anti-inflammatory cytokines. Furthermore,IL1F7b can also inhibit dendritic cell activation.

## **Clinical and Translational Updates**

# Human IL-37 / IL-1F7 Protein, His Tag

Catalog # ILB-H51H5



Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.