# Recombinant Rat IL-1β Protein(Sumo Tag)

**Catalog Number: PDER100247**

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

## Description

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|---|---|
| **Species** | Rat |
| **Source** | E.coli-derived Rat IL-1β protein Val117-Ser268, with an N-teminal Sumo |
| **Mol_Mass** | 29.6 kDa |
| **Accession** | Q63264 |
| **Bio-activity** | Not validated for activity |

## Properties

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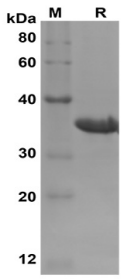
|---|---|
| **Purity** | > 95% as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 10 EU/mg of the protein as determined by the LAL method |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol. |
| **Reconstitution** | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis |

## Data




SDS-PAGE analysis of Rat IL-1β proteins, 2μg/lane of Recombinant Rat IL-1β proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 36 kDa

## Background

Interleukin-1 beta (IL1 beta or IL1B) also known as catabolin, is a member of the interleukin 1 cytokine family. IL1 is a pleiotropic cytokine. It is involved in the inflammatory response, cell growth, and tissue repair in the cortex. The IL1 superfamily consists of three members, IL1A (IL1 alpha), IL1B (IL1 beta), and IL1 receptor antagonist (IL1Ra). In clinical, it has been reported that Interleukin (IL)-1 may influence Th1 / Th2 immune responsiveness and has been implicated in the establishment of a successful pregnancy. Proinflammatory interleukin (IL)-1 gene polymorphisms associated with high levels of IL-1βeta activity increase the risk for hypochlorhydria and distal gastric carcinoma. IL1B polymorphisms may be involved in susceptibility to SSc. Moreover, the IL2-384-Gallele may be a marker for the limited phenotype of systemic sclerosis (SSc).

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