



# Recombinant Protein Technical Manual

**Recombinant Rat IL beta/IL1B Protein (mature form)(Active)**  
RPES3892

## Product Data:

**Product SKU:** RPES3892

**Size:** 20µg

**Species:** Rat

**Expression host:** E. coli

**Uniprot:** Q63264

## Protein Information:

**Molecular Mass:** 17.4 kDa

**AP Molecular Mass:** 35 kDa

**Tag:**

**Bio-activity:** 1. Measured in a cell proliferation assay using D10. G4.1 mouse helper T cells. The ED50 for this effect is typically 3020 pg/mL. 2. Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The EC50 for this effect is typically 2000ng/mL.

**Purity:** > 98 % as determined by SDS-PAGE

**Endotoxin:** Please contact us for more information.

**Storage:** 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 40mM Tris, 0.15 M NaCl, pH 7.8

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Cell Culture

**Synonyms:** IL1B

## Immunogen Information:

**Sequence:** Val 117-Ser 268

## Background:

Interleukin 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) may influence Th1 / Th2 immune responsiveness and has been implicated in the establishment of successful pregnancy. Proinflammatory interleukin (IL) gene polymorphisms associated with high levels of ILbeta activity increase the risk for hypochlorhydria and distal gastric carcinoma. IL1B polymorphisms may be involved in susceptibility to SSc. Moreover, the IL2-384-G allele may be a marker for the limited phenotype of systemic sclerosis (SSc).