



# Recombinant Protein Technical Manual

## Recombinant Human IL beta/IL1B Protein (pro form, His Tag)(Active) RPES0237

### Product Data:

**Product SKU:** RPES0237

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_000567.1

### Protein Information:

**Molecular Mass:** 32.3 kDa

**AP Molecular Mass:** 34 kDa

**Tag:** N-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human IL1B at 10 µg/mL (100 µl/well) can bind human IL1R1. The EC50 of human IL1R1 is 0.198 µg/mL.

**Purity:** > 95 % as determined by reducing 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 PBS, pH 7.4

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

**Application:** Functional ELISA

**Synonyms:** IL;IL beta;ILB;IL1-BETA;IL1F2

## Immunogen Information:

**Sequence:** Met 1-Ser 269

## 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).