

# **Product datasheet for TP728234**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Recombinant IL-1 beta (Interleukin-1 beta), Human

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant IL-1 beta (Interleukin-1 beta), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MASAPVRSLNCTLRDSQQKSLVMSGPYELKALHLQGQDMEQQVVFSMSFVQGEESNDKIPVALGLKEK NLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKIEINNKLEFESAQFPNWYISTSQAENMPVFLGG

TKGGQDITDFTMQFVSS with polyhistidine tag at the C-terminus.

Tag: His Tag (C-term)

**Predicted MW:** The protein has a calculated MW of 18.5 kDa. The protein migrates as 17 kDa under reducing

condition (SDS-PAGE analysis).

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

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 8.0.

**Bioactivity:** Measure by its ability to induce IL-8 secretion in HT29 cells. The ED<sub>50</sub> for this effect is <2.0

ng/mL. The specific activity of recombinant human IL-1 beta is approximately >3 x 10<sup>7</sup> IU/mg.

**Endotoxin:**  $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$ 

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 μg/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do

Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P01584

Synonyms: Catabolin, Lymphocyte-Activating Factor (LAF), Endogenous Pyrogen (EP), Leukocyte

Endoge\_x005f\_x005f\_x005f\_x005f\_x005f\_x0002\_nous Mediator (LEM), Mononuclear Cell

Factor (MCF)

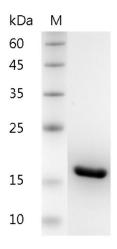




## **Summary:**

Interleukin-1 beta (IL-1 $\beta$ ) is a major cytokine expressed in macrophage, NK cells, monocytes, and neutrophils. It also plays fundamental role in inflammatory response, including monocyte activation, which is essential for the host defense and pathogen and pathogen resistance. Pro-IL-1 $\beta$  is cleaved by cytosolic caspase 1 to form mature IL-1 $\beta$ .

# **Product images:**



SDS- PAGE analysis of recombinant human IL-1 heta