

## IL-1 $\beta$ /IL1F2, Human, Recombinant

Cat. No. : PCK047

### General Information

<b>Synonyms</b>	Catabolin;Lymphocyte-Activating Factor (LAF);Endogenous Pyrogen (EP);Leukocyte Endoge_x0002_nous Mediator (LEM);Mononuclear Cell Factor (MCF)
<b>Species</b>	Human
<b>Expression host</b>	E.coli
<b>Sequence</b>	MASAPVRSLNCTLRDSQQKSLVMSGPYELKALHLQGQDMEQQVFSMSFVQGEESNDKIPVALGLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKIEINNKLFEFESAQFPNWIYSTSQAENMPVFLGGTKGGQDITDFTMQFVSS with polyhistidine tag at the C-terminus.
<b>Accession</b>	P01584.2
<b>Tag</b>	His-tag at the C-terminus
<b>Mol mass</b>	18.48 kDa
<b>Expiration date</b>	12 months
<b>Bio activity</b>	Measure by its ability to induce proliferation in D10.G4.1 cells. The ED50 for this effect is < 10 pg/mL. The specific activity of recombinant human IL-1 beta is approximately > 1.5 $\times$ 10 <sup>8</sup> IU/mg.Measure by its ability to induce IL-8 secretion in HT29 cells. The ED50 for this effect is 1.8-5.1 ng/mL.

### Product feature

<b>Purity</b>	> 98% as determined by SDS-PAGE. Ni-NTA chromatography
<b>Endotoxin (EU/<math>\mu</math>g)</b>	< 0.1
<b>Storage</b>	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°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 -5~-20°C or -80°C for 3-6 months.
<b>Shipping</b>	Ice bag
<b>Formulation</b>	The protein was lyophilized from a 0.2 $\mu$ m filtered solution containing 1 $\times$ PBS, pH 8.0.
<b>Reconstitution</b>	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 $\mu$ g/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

### Background

Interleukin 1 beta (IL-1 $\beta$ ) also known as leukocytic pyrogen, leukocytic endogenous mediator, mononuclear cell factor, lymphocyte activating factor and other names, is a cytokine protein that in humans is encoded by the IL1B gene. There are two genes for interleukin-1 (IL-1): IL-1 alpha and IL-1 beta (this gene). IL-1 $\beta$  precursor is cleaved by cytosolic caspase 1 (interleukin 1 beta convertase) to form mature IL-1 $\beta$ .