

## IL-6/IFN-β2/BSF-2, Human, Recombinant

Cat. No. : PCK085

### General Information

<b>Synonyms</b>	IFN-β2;B-Cell Differentiation Factor (BCDF);BSF-2;HPGF;HSF;MGI-2
<b>Species</b>	Human
<b>Expression host</b>	E.coli
<b>Sequence</b>	MVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGIALRKETCNKSNMCESSKEALAENNLNL PKMAEKDGCQSGFNEETCLVKIITGLLEFEVYLEYLQNRFSSEEQARAVQMSTKVLIQFLQKK AKNLDAITTPDPTTNASLLTKLQAQNQLQDMTTHLILRSFKEFLQSSLRALRQM with polyhistidine tag at the C-terminus.
<b>Accession</b>	P05231.1
<b>Tag</b>	His-tag at the C-terminus
<b>Mol mass</b>	21.8 kDa
<b>Expiration date</b>	12 months
<b>Bio activity</b>	Measure by its ability to induce proliferation in TF-1 cells. The ED50 for this effect is < 0.5 ng/mL. The specific activity of recombinant human IL-6 is approximately > 5 × 10 <sup>8</sup> IU/mg. Measure by its ability to induce proliferation in MCF-7 cells. The ED50 for this effect is < 4.4 ng/mL.

### Product feature

<b>Purity</b>	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
<b>Endotoxin (EU/μg)</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 μm filtered solution containing 1 × 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 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

### Background

Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-inflammatory myokine. In humans, it is encoded by the IL6 gene. In addition, osteoblasts secrete IL-6 to stimulate osteoclast formation. Smooth muscle cells in the tunica media of many blood vessels also produce IL-6 as a pro-inflammatory cytokine. IL-6's role as an anti-inflammatory myokine is mediated through its inhibitory effects on TNF-alpha and IL-1, and activation of IL-1ra and IL-10.