

## Recombinant Human Interleukin-6 (IL-6)

<b>Alternate names:</b>	B-cell stimulatory factor 2, BSF-2, CDF, CTL differentiation factor, Hybridoma growth factor, IFNB2, IL-6, Interferon beta-2
<b>Catalog No.:</b>	PA079
<b>Quantity:</b>	5 µg
<b>Background:</b>	IL-6 is a pleiotropic cytokine that plays an important role in host defense by regulating immune and inflammatory responses. Produced by T cells, monocytes, fibroblasts, endothelial cells and keratinocytes, IL-6 has diverse biological functions. It stimulates B-cell differentiation and antibody production, synergizes with IL-3 in megakaryocyte development and platelet production, induces expression of hepatic acute-phase proteins, and regulates bone metabolism. IL-6 signals through the IL-6 receptor system that consists of two chains, IL-6R alpha and gp130. Murine IL-6 is inactive on human cells, while both human and murine are equally active on murine cells.
<b>Uniprot ID:</b>	<a href="#">P05231</a>
<b>NCBI:</b>	<a href="#">NP_000591</a>
<b>GenID:</b>	<a href="#">3569</a>
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Format:</b>	<b>State:</b> Lyophilized (sterile filtered) purified fraction. <b>Purity:</b> >98% pure by SDS-PAGE and HPLC analyses. <b>Buffer System:</b> 10mM Sodium Phosphate, pH 7.5 <b>Endotoxin Level:</b> < 0.1 ng per µg (1EU/µg) <b>Reconstitution:</b> Restore in Water to a concentration of 0.1-0.5 mg/ml. <b>Note:</b> Gently shake the solution for about 10 minutes for better solubility. This solution can then be diluted into other aqueous buffers and stored at 2-8°C for 1 week or at -20°C for future use.
<b>Description:</b>	Recombinant Human IL-6 is a 20.9 kDa protein containing 184 amino acid residues. <b>AA Sequence:</b> PVPPGEDSKD VAAPHRQPLT SSERIDKQIR YILDGISALR KETCNKSNMC ESSKEALAEN NLNLPKMAEK DGCFFQSGFNE ETCLVKIITG LLEFEVYLEY LQNRFFESSEE QARAVQMSTK VLIQFLQKKA KNLDAITTPD PTTNASLLTK LQAQNQLQD MTHLILRSF KEFLQSSLRA LRQM <b>Biological Activity:</b> The ED50 as determined by the dose-dependent stimulation of the proliferation of IL-6 dependent murine 7TD1 cells is ≤ 0.1 ng/ml. <b>Specific Activity:</b> ≥ 1 x 10 <sup>7</sup> units/mg <b>Molecular weight:</b> 20.9 kDa (184 aa)
<b>Add. Information:</b>	Centrifuge the vial prior to opening.

**Storage:**

The lyophilized protein is stable at -20°C for one year from date of despatch.  
Reconstituted IL-6 is stable for 3 months when stored in working aliquots with a carrier protein at -20°C.  
Avoid repeated freezing and thawing.