

## IL-6

### Interleukin-6, B-cell stimulatory factor human, recombinant, *E. coli*

Cat. No.	Amount
PR-466	20 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### Avoid freeze / thaw cycles

#### Form

Lyophilized. IL-6 is lyophilized from a concentrated PBS pH 7.4 solution.

#### Solubility

It is recommended to reconstitute the lyophilized IL-6 in bidest H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

#### Activity

ED<sub>50</sub>: < 0.1 ng/ml, corresponding to a specific activity of 1 x 10<sup>7</sup> IU/mg, determined by the dose-dependent stimulation of murine 7TD1 cells.

#### Molecular Weight

21 kDa

#### Purity

≥ 95% by SDS-PAGE and RP-HPLC

#### Description

Recombinant human IL-6 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 184 amino acids.

IL-6 is a variably glycosylated protein produced by many different cells, but the main sources *in vivo* are stimulated monocytes/macrophages, fibroblasts, and vascular endothelial cells, indicative of its role in the modulation of the immune system.

Other cells known to express IL-6 include keratinocytes, osteoblasts, T-cells, B-cells, neutrophils, eosinophils, mast cells, smooth muscle cells, and skeletal muscle cells. Typical stimuli for IL-6 production are IL-1, TNF-α, and bacterial endotoxin.

IL-6 is purified by proprietary chromatographic techniques.

#### Selected References:

- Febbraio *et al.* (2002) Muscle-derived interleukin-6: mechanisms for activation and possible biological roles. *FASEB J.* **16**:1335.
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- Saha *et al.* (2003) Two novel somatic mutations in the human interleukin 6 promoter region in a patient with sporadic breast cancer. *Eur. J. Immunogenet.* **30**:397.
- Matthews *et al.* (2003) Cellular cholesterol depletion triggers shedding of the human interleukin-6 receptor by ADAM10 and ADAM17 (TACE). *J. Biol. Chem.* **278**:38829.
- Li *et al.* (2003) Effect of *in situ* expression of human interleukin-6 on antibody responses against *Salmonella typhimurium* antigens. *FEMS Immunol. Med. Microbiol.* **37**:135.
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- Song *et al.* (2002) Human interleukin-6 induces human herpesvirus-8 replication in a body cavity-based lymphoma cell line. *J. Med. Virol.* **68**:404.