



## Product Information

### ANTI-MOUSE INTERLEUKIN 6

Developed in Rabbit  
IgG Fraction of Antiserum

Product No. **I3393**

Anti-Mouse Interleukin 6 (IL-6) is developed in rabbit using purified mouse recombinant IL-6 produced in *E. coli* as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other rabbit serum proteins.

Rabbit Anti-Mouse IL-6 detects recombinant mouse IL-6 by dot blot immunoassay. No reaction is observed versus recombinant mouse IL-1 $\beta$ , recombinant human IL-1 $\beta$ , recombinant human TNF- $\alpha$ , recombinant human IL-1 $\alpha$ , recombinant human IL-2 or recombinant human leukemia inhibitory factor (LIF).

Interleukin-6 is a multifunctional protein originally discovered in the media of cells stimulated with double stranded RNA.<sup>1</sup> IL-6 appears to be directly involved in the responses that occur after infection and injury, and may prove to be as important as IL-1 and TNF- $\alpha$  in regulating the acute phase response.<sup>2,3</sup> IL-6 is reported to be produced by fibroblasts, activated T cells, activated monocytes or macrophages, and endothelial cells. It acts upon a variety of cells, including fibroblasts, myeloid progenitor cells, T cells, B cells, and hepatocytes. IL-6 induces multiple effects as indicated by its numerous synonyms: plasmacytoma growth factor (PCT-GF), interferon- $\beta_2$ , monocyte-derived human B cell growth factor, B cell stimulating factor (BSF-2), hepatocyte stimulating factor (HSF) and interleukin hybridoma/plasmacytoma-1 (IL-HP1). IL-6 also interacts with IL-2 in the proliferation of T lymphocytes,<sup>5</sup> and potentiates the proliferative effect of IL-3 on multipotential hematopoietic progenitors.<sup>4</sup>

Rabbit Anti-Mouse IL-6 may be used to study mouse IL-6 using immunoblotting, dot blot, ELISA, or selective neutralization of mouse IL-6 bioactivity in cell culture.

One ml of Rabbit Anti-Mouse IL-6 neutralizes a minimum of 500,000 Units of recombinant mouse IL-6. Neutralization of proliferative activity is tested in culture using mouse T1165 cells.<sup>5</sup> One unit is defined as the amount of IL-6 required to induce half-maximal incorporation of <sup>3</sup>H-thymidine.

#### Reagents

The product is supplied as a liquid in 0.01 M phosphate buffered saline, pH 7.4, containing 15mM sodium azide as a preservative.

#### Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

#### Storage

Store undiluted antibody at -20 °C. The product should be stored frozen in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended.

#### Product Profile

A minimum working dilution of 1:1,000 is determined using 100 ng recombinant mouse IL-6/dot on nitrocellulose membranes.

Protein Concentration: Determined by absorbance at 280 nm ( $E_{280}^{1\%} = 14.0$ ).

Dilute antibody in tissue culture media containing 10% serum or buffered saline containing 1% BSA, according to the planned application.

## References

1. Billiau, A., Immunol. Today, **8**, 84 (1987).
2. Gauldie, J., et al., Proc. Natl. Acad. Sci. USA, **84**, 7251 (1987).
3. Van Snick, J., Ann. Rev. Immunol., **8**, 253 (1990).
4. Van Snick, J., et al., Proc. Natl. Acad. Sci. USA, **83**, 9679 (1986).
5. Nordan, R., and Potter, M., Science, **233**, 566 (1986).

