**Product Description**

Monoclonal Anti-Rat Interleukin-6 (IL-6) (mouse IgG2b isotype) is derived from a hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a mouse immunized with purified recombinant rat IL-6, expressed in *E. coli*. The antibody is purified from tissue culture supernatant using protein G.

Monoclonal Anti-Rat IL-6 may be used for detection and localization of rat interleukin-6. The antibody may be used for ELISA.

Interleukin-6 (IL-6) is a multifunctional protein originally discovered in the medium taken from RNA-stimulated fibroblastoid cells.\(^1\) IL-6 was originally identified as a T cell-derived lymphokine that induces the final maturation step of B cells into antibody producing cells.\(^2\) IL-6 is a pleiotrophic factor and acts on a variety of tissues.\(^3,4\) Activities include: immunoglobulin secretion in B cells, production of various acute-phase proteins in liver cells, growth promotion on various B cells such as myeloma, plasmacytoma and hybridoma cells, maturation of megakaryocytes, neuronal differentiation, and osteoclast activation. IL-6 has been implicated in many diseases,\(^5\) including Castleman's disease, multiple myeloma, rheumatoid arthritis and postmenopausal osteoporosis. IL-6 is produced by fibroblasts, activated T cells, activated monocytes or macrophages, and endothelial cells. Alternative names are plasmacytoma growth factor (PCT-GF), interferon-β-2 (IFN-β\(_2\)), monocyte derived human B cell growth factor, B cell stimulating factor (BSF-2), hepatocyte stimulating factor (HSF) and Interleukin Hybridoma/Plasmacytoma-1 (IL-HP1).

**Reagents**

Monoclonal Anti-Rat IL-6 is supplied lyophilized from a 0.2 µm filtered solution of phosphate buffered saline.

Endotoxin level is < 10 ng per mg antibody as determined by the LAL method.

**Preparation Instructions**

To one vial of lyophilized powder, add 1 ml of 0.2 µm filtered PBS to produce a 0.5 mg/ml stock solution of antibody. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

**Storage/Stability**

Prior to reconstitution, store at −20°C. Reconstituted product may be stored at 2-8°C for at least one month. For prolonged storage, freeze in working aliquots at −20°C. Avoid repeated freezing and thawing.

**Product Profile**

For capture ELISA, using a biotinylated detection antibody, a working concentration of 4 µg/ml is determined as coat using 100 µl/well to detect a range of 125 – 8000 pg/ml of recombinant rat IL-6.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilutions by titration test.

**References**


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