



Anti-Rat IL-6

20150223ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	104-P27G
Size:	100 µg
Lot. No.:	According to product label

Preparation: Produced from sera of rabbits pre-immunized with highly pure recombinant Rat IL-6. Anti-Rat IL-6 specific antibody was purified by affinity chromatography employing immobilized Rat IL-6 matrix.

Target Background

Synonyms (Target):	Il6; ILg6; Ifnb2
---------------------------	------------------

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 α and gp130. Murine IL-6 is inactive on human cells, while both human and murine are equally active on murine cells. Recombinant rat IL-6 is a 21.7 kDa protein containing 187 amino acid residues.

Database References Target

Protein RefSeq:	NP_036721
Uniprot ID:	P20607
mRNA RefSeq:	NM_012589

Product Specifications

Species reactivity	Rat
Clone/Ab feature	Goat IgG
Cross reactivity	Rat
Host	Goat
Clonality	Polyclonal Antibody
Purification	Antigen-affinity purified
Immunogen	recombinant rat IL-6
Formulation	lyophilized from PBS
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: The lyophilized antibody is stable for at least 2 years from date of receipt at -20°C. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Neutralization: To yield one-half maximal inhibition [ND₅₀] of the biological activity of Rat IL-6 (0.5 ng/ml), a concentration of 0.30-0.50 µg/ml of this antibody is required.

ELISA:

Indirect: To detect Rat IL-6 by indirect ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Rat IL-6.

Sandwich: To detect Rat IL-6 by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antigen affinity purified antibody, in conjunction with compatible secondary reagents, allows the detection of at least 0.2 - 0.4 ng/well of recombinant Rat IL-6.

Western Blot: To detect Rat IL-6 by Western Blot analysis this antibody can be used at a concentration of 0.1- 0.2 µg/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Rat IL-6 is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!