# SIGMA

**ANTI-HUMAN INTERLEUKIN-2**
**SOLUBLE RECEPTOR** γ **(IL-2 sRγ)**
**Developed in Goat, Affinity Isolated Antibody**

Product Number **I6402**

## Product Description
Anti-Human Interleukin-2 Soluble Receptor gamma (IL-2 sRγ) is developed in goat using a recombinant human IL-2 sRγ), expressed in Sf21 cells as immunogen. The antibody is purified using IL-2 Rγ affinity chromatography.

Anti-Human IL-2 sRα specifically reacts with IL-2 Rγ. By ELISA and immunoblotting the antibody shows < 2% cross-reactivity with recombinant human IL-3 sRα and IL-5 sR. In addition, the antibody shows no cross-reactivity with other cytokines tested.*

The biological effects of IL-2R signals are much more complex than simply mediating T-cell growth. Depending on the set of conditions, IL-2R signals may also promote cell survival, effector function, and apoptosis. These sometimes contradictory effects underscore the fact that a diversity of intracellular signaling pathways are potentially activated by IL-2R. There are at least 3 components of the IL-2 receptor, IL-2 Rα, IL-2 βR, and IL-2 Rγ chains. The IL-2 Rγ chain is shared by IL-2, IL-4 and IL-7.[1,2] The low affinity α chain is a 55 kD polypeptide. It is incapable of transmitting intracellular signals due to its short cytoplasmic tail. However, it can bind IL-2 rapidly to the cell membrane. The β chain (75 kD) and the γ chain (64 kD) form a complex that can bind IL-2 with high affinity and slow dissociation and can mediate signal transduction.
Cells known to express the gamma-chain include monocytes,[3,4] neutrophils,[5] thymocytes,[6] CD4^{+} and CD8^{+} T cells, NK cells and B cells.[7]

## Reagents
The product is supplied lyophilized from a 0.2 µm filtered solution in 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 0.25 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 Indirect Immunoblotting, a working concentration of 1-2 µg/ml is determined using recombinant human IL-2 sRγ at 1 ng/lane under non-reducing and reducing conditions.

For Indirect ELISA, a working concentration of 0.5 - 1 µg/ml is determined to detect recombinant IL-2 sRγ to a limit of 0.15 ng/well.

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

## References
1.  Noguchi, M., et al., Science, **262**, 1877 (1993)
2.  Russel, S.M., et al., Science, **262**, 1880 (1993).
3.  Epling-Burnette, P.K., et al., Eur. J. Immunol., **25**, 291 (1995).
4.  Bosco, M.C., et al., Blood, **83**, 2995 (1994).
5.  Liu, J.H., et al., Blood, **84**, 3870 (1994).
6.  DiSanto, J.P., et al., Eur. J. Immunol., **24**, 3014 (1994).
7.  Sugamura, K., et al., Adv. Immunol., **59**, 225 (1995).

* rhANG, rhAR, rhB7-1, rhB7-2, rmB7-2, rhBTC, rhβ-NGF, rhBDNF, rmC10, rhCD4, rhCD8, rhCD28, rhCNTF, rrCNTF, rhEGF, rhENA-78, rhEpo, rhFGF acidic, rhFGF basic, rhFGF-4, rhFGF-5, rhFGF-6, rhFGF-7, rhFGF-9, rhG-CSF, rmG-CSF, rhGM-CSF, rhGM-CSF Rα, rmGM-CSF, rhGROα, rhGROβ,

rhGROγ, rhHB-EGF, rhHRG-α, rhHGF, rhI-309, rhIFN-γ, rhIGF-I, rhIGF-I R, rhIL-1α, rhIL-1 RI, rhIL-1 RII, rmIL-1α, rhIL-1β, rmIL-1β, rhIL-1ra, rmIL-1ra, rhIL-2, rhIL-2 sRα, rhIL-2 sRβ, rmIL-2, rhIL-3, rmIL-3, rhIL-4, rhIL-4 sR, rmIL-4, rhIL-5, rhIL-5 sRα, rmIL-5, rhIL-6, rhIL-6 sR, rmIL-6, rhIL-7, rhIL-7 R, rmIL-7, rhIL-8, rhIL-9, rmIL-9, rhIL-10, rhIL-10 sR, rmIL-10, rhIL-11, rhIL-12, rmIL-12, rhIL-13, rmIL-13, rhIL-15, rhIP-10, rhJAK-1, rmJAK-1, rmJE, rhLIF, rhLIF R, rmLIF, rhM-CSF, rmM-CSF, rhMCP-1, rhMCP-1 R, rhMCP-2, rhMCP-3, rhMidkine, rhMIP-1α, rmMIP-1α, rhMIP-1β, rmMIP-1β, rmMIP-2, rhNT-3, rhNT-4, rhOSM, rhPD-ECGF, hPDGF, pPDGF, rhPDGF-AA, rhPDGF-AB, rhPDGF-BB, rhPDGF Rα, rhPIGF, rhPTN, rhRANTES, rhSCF, rmSCF, rhsgp130, rhSLPI, rhSTAT-1, rmSTAT-4, hTfR, rhTGF-α, rhTGF-β1, rhTGF-β2, rhTGF-β3, raTGF-β5, rhLAP (TGF-β1), rhLatent TGF-β1, rhTGF-β sRII, rhTGF-β sRIII, rhTNF-α, rmTNF-α, rhTNF-β, rhsTNF RI, rhsTNF RII, rhTPO, rhVEGF