ANTI-GRANULOCYTE COLONY STIMULATING FACTOR Receptor (G-CSF R, CD114), HUMAN
Developed in Goat, Affinity Isolated Antibody
Product Number G 3654

Product Description
Anti-Human Granulocyte Colony Stimulating Factor Receptor (G-CSF R, CD114) is developed in goat using a purified recombinant human granulocyte colony stimulating factor soluble receptor (G-CSF R), expressed in mouse NSO cells, as immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-G-CSF receptor antiserum by immuno-specific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the peptide.

Anti-Human Granulocyte Colony Stimulating Factor Receptor recognizes recombinant human G-CSF receptor by various immunochimical techniques including immunoblotting and ELISA.

Four distinct colony-stimulating factors (CSFs) promoting survival, proliferation and differentiation of bone marrow precursor cells have been well characterized: granulocyte/macrophage-CSF (GM-CSF), granulocyte-CSF (G-CSF), macrophage-CSF (M-CSF) and interleukin-3 (IL-3, Multi-CSF). G-CSF and M-CSF are lineage-restricted hematopoietic growth factors, stimulating final mitotic divisions and terminal cellular maturation of partially differentiated hematopoietic progenitors.

Human G-CSF binds and activates a G-CSF receptor, a 130 kDa to 150 kDa glycoprotein single chain receptor. The G-CSF receptor (CD114) has been classified as a member of the hematopoietic (cytokine) receptor family, cytokine receptor class I, or the gp 130 related cytokine receptor family (although it does not apparently bind to gp 130). G-CSF receptors can be found on neutrophils, myeloid leukemia cells that respond to G-CSF, bone marrow cells of neutrophilic granulocyte lineage, and on placental trophoblasts. In addition, a soluble form is also expressed.

Reagent
Anti-Human Granulocyte Colony Stimulating Factor Receptor is supplied as 100 µg of antiserum lyophilized from a 0.2 µm filtered solution of phosphate buffered saline (PBS).

Preparation Instructions
To one vial of lyophilized powder, add 1 ml of sterile phosphate buffered saline (PBS) to produce a 0.1 mg/ml stock solution of antibody.

Storage/Stability
Prior to reconstitution, store at −20 °C. Reconstituted product may be stored at 2 °C to 8 °C for at least one month. For prolonged storage, freeze in working aliquots at −20 °C. Avoid repeated freezing and thawing. Do not store in frost-free freezer.

Product Profile
For immunoblotting, a working concentration of 0.1 to 0.2 µg/ml antibody is recommended. The detection limit for recombinant human G-CSF R is approximately 5 ng/lane under non-reducing and reducing conditions.

For ELISAs, a working concentration of 0.5 to 1.0 µg/ml antibody is recommended. The detection limit for recombinant human G-CSF R is approximately 0.16 ng/well.

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

Endotoxin level is < 10 ng/mg antibody as determined by the LAL (Limulus amebocyte lysate) method.
References


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