

EPO- α /Fc Chimera, Human

Cat. No.: Z02907-1

Size: 1.0 mg

Synonyms: EPO-Fc Human;

Description:

Erythropoietin (EPO), a glycoprotein produced primarily by the kidney, is the principal factor that regulates erythropoiesis by stimulating the proliferation and differentiation of erythroid progenitor cells. The production of EPO by kidney cells is increased in response to hypoxia or anemia. Recombinant EPO has been approved for the treatment of anemia associated with chronic renal failure as well as for anemia of AZT treated AIDS patients. Erythropoietin/Fc Chimera is a long-acting version of EPO.

Source: CHO

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED50 determined by a cell proliferation assay using human megakaryoblastic leukemia cells is less than 2 ng/ml, corresponding to a specific activity of $>5.0 \times 10^5$ IU/mg.

Molecular Weight: Recombinant Human EPO/Fc produced in CHO is a dimeric, glycosylated, polypeptide chain consisting of two mature human EPO molecules linked to the Fc portion of human IgG1. The Fc component contains the CH2 domain, the CH3 domain and hinge region, but not the CH1 domain of IgG1. As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 140 kDa in non-reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $<-20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Purity: $>98\%$ by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 0.2EU/ μ g of rHuEPO-Fc as determined by LAL method.

Storage: This lyophilized preparation is stable at $2-8^\circ\text{C}$, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at $2-8^\circ\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.