



Product Datasheet

Product Name	Recombinant Human Erythropoietin-Alpha Fc-Chimera
Cata No	CB500227
Source	<i>Chinese Hamster Ovary Cells(CHO).</i>
Synonyms	EPO- α , EPO-alpha, Epoetin, EP, MGC138142.

Description

This gene is a member of the EPO/TPO family and encodes a secreted, glycosylated cytokine composed of four alpha helical bundles. The protein is found in the plasma and regulates red cell production by promoting erythroid differentiation and initiating hemoglobin synthesis. This protein also has neuroprotective activity against a variety of potential brain injuries and antiapoptotic functions in several tissue types.

Erythropoietin-alpha Fc-Chimera Human Recombinant is produced in Chinese hamster ovary (CHO) cells by recombinant DNA technology 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 .

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Specific Activity

The ED₅₀ as determined by the dose-dependant stimulation of human megakaryoblastic leukemia cells is less than 2.0 ng/ml, corresponding to a Specific Activity of 5.0 x 10⁵IU/mg.

Storage

Lyophilized Erythropoietin-a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution EPO-alpha should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Solubility

It is recommended to reconstitute the lyophilized Erythropoietin in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

*** For Non-Clinical Research Use Only ***