

Human Recombinant Erythropoietin-alpha CHO (rh EPO-alpha CHO)

Synonyms: Epoetin, EP, MGC138142.

Introduction: 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.

Description: Recombinant human EPO is produced in Chinese hamster ovary (CHO) cells by recombinant DNA technology is a single, polypeptide chain containing 166 amino acids and having a predicted molecular mass of 21,000 Dalton and apparent glycosylated molecular mass of 36-40kDa. EPO-a is purified by proprietary chromatographic techniques.

Source: *Chinese Hamster Ovary Cells (CHO)*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Each mg of lyophilized powder contains 0.59 mg sodium citrate, 0.58 mg sodium chloride and 0.006 mg citric acid.

The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh EPO-alpha CHO in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized EPO although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution EPO 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).

Please prevent freeze-thaw cycles.

Purity: Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Amino Acid: APPRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNIFYA WKRMEVGGQA VEVWQGLALL SEAVLRGQAL LVNSSQPWEP LQLHVDKAVS GLRSLTLLR ALGAQKEAIS PPDAASAAPL RTITADTFRK LFRVYSNFLR GKLKLYTGEA CRTGDR.

Biological Activity : The specific activity was measured by Normocyth -aemic mice and was found to be 1.5 x10⁵ IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	11344793
<i>medium</i>	50 µg	Cat.N°	11344795

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com