



## Erythropoietin alpha, human recombinant (rHuEPO-a)

**Catalog No:** 64351  
**Lot No:** XXXXX  
**Source:** CHO cells  
**Synonyms:** Erythropoietin-Alpha, EPO-a, EPO-alpha, Epoetin, EP, MGC138142

### Background

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

Erythropoietin-alpha human recombinant produced in Chinese Hamster Ovary (CHO) cells 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 36-40 kDa Dalton. EPO-a is purified by proprietary chromatographic techniques.

### 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.

### Solubility

It is recommended to reconstitute the lyophilized EPO-alpha in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

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). 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 Sequence

APPRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNFYA WKRMEVGQQA VEVWQGLALL SEAVLRGQAL  
LVNSSQPWEP LQLHVDKAVS GLRSLTTLR ALGAQKEAIS PPDAASAAPL RTITADTFRK LFRVYSNFLR GKCLKLYTGEA  
CRTGDR

### Activity

The specific activity was measured by Normocyth -aemic mice and was found to be 150,000 IU/mg.

**CONTACT US TODAY**

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • info@biomol.de • www.biomol.de

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51



### Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.

**CONTACT US TODAY**

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • [info@biomol.de](mailto:info@biomol.de) • [www.biomol.de](http://www.biomol.de)

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51