

Erythropoietin

Human, Recombinant (rHuEPO)

Expressed in CHO cells

Cat. No. CRP0834

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Erythropoietin (EPO) is 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.

Amino-Acid Sequence: The mature protein consists of a 165 amino acid polypeptide chain heavily glycosylated at three N-linked and O-linked glycosylation sites.

M. W. : 35-45kDa

Recombinant: Expressed in CHO cells

Purity: ≥98% as determined by SDS-PAGE and HPLC analyses

Formulation: Sterile filtered lyophilized powder.

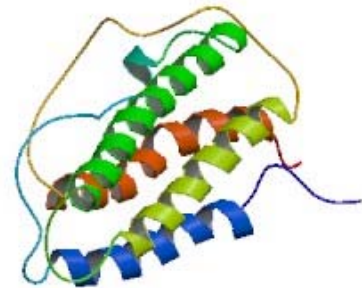
Specific Activity: rHuEPO is fully biologically active when compared to standards. Its specific activity is $\geq 1.2 \times 10^5$ IU/mg.

Endotoxin: Less than 0.1EU/μg determined by LAL test.

Reconstitution: It is recommended to reconstitute the lyophilized rHuEPO in sterile buffer not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

Storage: Lyophilized rHuEPO although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Reconstituted rHuEPO aliquots should be stored at -20°C for maximal stability up to three years. Aliquot to avoid repeated freeze-thaw cycles.

FOR RESEARCH USE ONLY



Available structures: [1buy](#), [1cn4](#), [1eer](#)

GENE INFORMATION

Gene Name: [EPO](#)

Gene Alias: EP; MGC138142

Gene Type: protein coding

mRNA Refseq: [NM_000799](#)

Protein Refseq: [NP_000790](#)

MIM: [133170](#)

GeneID: [2056](#)

UniProt ID: P01588

Chromosome Location: 7q22

Pathway: Cytokine-cytokine receptor interaction ; Hematopoietic cell lineage ; Jak-STAT signaling pathway

Function: erythropoietin receptor binding IEA ;hormone activity IEA ;protein binding

REFERENCES

1. Siren AL et al. Erythropoietin prevents neuronal apoptosis after cerebral ischemia and metabolic stress. Proc Natl Acad Sci USA , 2001, 98: 4044–4049.
2. Haroon ZA et al. "A novel role for erythropoietin during fibrin-induced wound-healing response". Am J Pathol , 2003, 163: 993–1000.
3. Jelkmann, Wolfgang. Erythropoietin after a century of research: younger than ever European Journal of Haematology, 2007, 78 (3):183–205.