

EPO

Recombinant Human Erythropoietin alpha, Liquid

Catalog No.	CRE135A	Quantity:	500 IU
	CRE135B		2000 IU
	CRE135C		1.0 mg

Alternate Names: EP, MVCD2, EPO

Description: This product is a liquid formulation of Recombinant Human Erythropoietin alpha (EPO). EPO is a glycoprotein produced primarily by the kidney and 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. The cDNAs for EPO have been cloned from human, mouse, dog, etc. The mature proteins from the various species are highly conserved, exhibiting greater than 80% aa sequence identity. Human EPO cDNA encodes a 193 aa residue precursor protein that is processed to yield a 165 aa residue mature protein. EPO contains one O-linked and three N-linked glycosylation sites. Glycosylation of EPO is required for EPO biological activities in vivo. EPO exhibits structural as well as aa sequence identity to the amino terminal 153 aa region of thrombopoietin.

Concentration: 0.608 mg/ml

Gene ID: 2056

Source: CHO cells

Molecular Weight: Mature human EPO, containing 165 amino acid residues, has a predicted molecular mass of approximately 21 kDa. As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 36-40 kDa in SDS-PAGE.

Formulation: Sterile filtered clear colorless liquid in sodium citrate buffer + NaCl

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

Endotoxin Level: < 0.1 ng/μg of protein.

Specific Activity: Fully biologically active when compared to standard. The Specific Activity was measured by the stimulation of reticulocyte production in normocytic mice and was found to be no less than 1.5×10^5 IU/mg.

Amino Acid Sequence: APPRLICDSR VLERYLLEAK EAENITGCA EHC SLNENIT VPD TKVNFYA
WKRMEVGGQA VEVWQGLALL SEAVLRGQAL LVNSSQPWEP LQLHVDKAVS
GLRSLTLLR ALGAQKEAIS PPDAASAAPL RTITADTFRK LFRVYSNFLR
GKLKLYTGEA CRTGDR

Storage & Stability: Store at 2-4°C under sterile conditions after opening. Stable for 2 years. **Do Not Freeze.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

