

## Erythropoietin- $\alpha$ (EPO- $\alpha$ ), Human Recombinant

<b>CATALOG #:</b>	4763-10	10 $\mu$ g
	4763-50	50 $\mu$ g
	4763-1000	1 mg
<b>ALTERNATE NAMES:</b>	Erythropoietin, Epoetin, EPO.	
<b>SOURCE:</b>	Chinese Hamster Ovary Cells (CHO)	
<b>PURITY:</b>	$\geq$ 90% as determined by SDS-PAGE and HPLC	
<b>MOLECULAR WEIGHT:</b>	18.4 kDa	
<b>ENDOTOXIN:</b>	Less than 0.1 ng/ $\mu$ g (1 EU/ $\mu$ g) of protein	
<b>PHYSICAL APPEARANCE:</b>	Lyophilized powder	
<b>FORMULATION:</b>	Sterile filtered through a 0.2 $\mu$ m filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.5.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1 to 1.0 mg/ml.

**STORAGE CONDITIONS:**

The lyophilized protein is best-stored desiccated -20 °C to -80 °C. Reconstituted solutions should be stored at -20 °C to -80 °C. Avoid freeze-thaw cycles.

**DESCRIPTION:**

Erythropoietin (EPO) is a glycoprotein hormone that is principally known for its role in erythropoiesis, where it is responsible for stimulating proliferation and differentiation of erythroid progenitor cells. The differentiation of CFU-E (Colony Forming Unit -Erythroid) cells into erythrocytes can only be accomplished in the presence of EPO. Physiological levels of EPO in adult mammals are maintained primarily by the kidneys, whereas levels in fetal or neonatal mammals are maintained by the liver. EPO also can exert various non-hematopoietic activities, including vascularization and proliferation of smooth muscle, neural protection during hypoxia, and stimulation of certain B cells. BioVision's Human EPO contains 166 amino acid residues and has a calculated molecular weight of approximately 18.4 kDa. As a result of glycosylation, Recombinant Human EPO migrates with an apparent molecular mass of 37.0 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

**BIOLOGICAL ACTIVITY:**

Determined by a cell proliferation assay using TF-1 cells. The expected ED50 for this effect is 0.8-1.0 ng/ml.

**AMINO ACID SEQUENCE:**

APRRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNIFYA WKRMEVGGQA  
VEVWQGLALL SEAVLRGQAL LVNSSQPWEP LQLHVDKAVS GLRSLTLLR ALGAQKEAIS  
PPDAASAAPL RTITADTFRK LFRVYSNFLR GKLKLYTGEA CRTGDR

**RELATED PRODUCTS:**

- EPO-alpha, human recombinant (**Cat # 4764-10, -500**)
- EPO-beta, human recombinant (**Cat # 4766-500, -1000**)
- EPO, Human CellExp™, human recombinant (**Cat # 6447-10, -50**)

**FOR RESEARCH USE ONLY! Not to be used on humans.**