

## Recombinant Human EPO

Catalog No: C001

<b>Description</b>	Recombinant Human Erythropoietin is produced by our Mammalian expression system and the target gene encoding Ala28-Arg193 is expressed with a 6His tag at the C-terminus.
<b>Source</b>	Human cells
<b>Alternative name</b>	Erythropoietin; Epoetin; EPO
<b>Accession No.</b>	P01588
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
<b>Quality Control</b>	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg).
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.  It is not recommended to reconstitute to a concentration less than 100µg/ml.  Dissolve the lyophilized protein in distilled water.  Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Amino Acid Sequence</b>	APPRLICDSRVLERYLLEAKEAENITTGCAEHCSLNENITVPDTKVNIFYAWKRMEVGQQAVEVWQGL ALLSEAVLRGQALLVNS SQPWEPLQLHVDKAVSGLRSLTLLRALGAQKEAISPPDAASAAPLRITADTFRKLFRVYSNFLRGK LKLYTGEACRTGDRHHH HHH
<b>Background</b>	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. Erythropoietin is a member of the EPO/TPO family. It is a secreted, glycosylated cytokine composed of four alpha helical bundles. 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. Genetic variation in erythropoietin is associated with susceptibility to microvascular complications of diabetes type 2. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy.

**SDS-PAGE**

