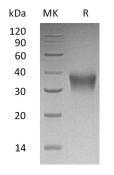


# Summary

Name	EPO/Erythropoietin
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/µg as determined by LAL test.
Construction	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.
Accession #	P01588
Host	Human Cells
Species	Human
Predicted Molecular Mass	19.2 KDa
Formulation	Lyophilized from a 0.2 $\mu m$ filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Lyophilized protein should be stored at $\leq -20^{\circ}$ C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}$ C for 3 months.
Reconstitution	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. 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.

### **SDS-PAGE** image



## Background



#### **Alternative Names**

Background

Erythropoietin; Epoetin; EPO

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 susceptbility 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 endstage renal disease, and diabetic neuropathy.

#### **Note** For Research Use Only , Not for Diagnostic Use.