



Datasheet for ABIN987828  
**EPO Protein (AA 28-193)**



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3 Images

Overview

Quantity:	50 µg
Target:	EPO
Protein Characteristics:	AA 28-193
Origin:	Human
Source:	CHO Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50< 1 ng/mL, measured in a cell proliferation assay using TF-1 human erythroleukemic cells, corresponding to a specific activity of >1 x 10 <sup>6</sup> units/mg
Purity:	> 95 % as analyzed by SDS-PAGE and HPLC.
Endotoxin Level:	< 0.2 EU/µg, determined by LAL method.

Target Details

Target:	EPO
Abstract:	<a href="#">EPO Products</a>
Target Type:	Hormone
Background:	Erythropoietin (EPO), a glycoprotein produced primarily by the kidney, 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

## Target Details

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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, canine, etc. The mature proteins from the various species are highly conserved, exhibiting greater than 80 % sequence identity at the amino acid level. Human EPO cDNA encodes a 193 amino acid residue precursor protein that is processed to yield a 165 amino acid 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 amino sequence identity to the amino terminal 153 amino acid region of thrombopoietin.

Synonyms: Human EPO-alpha, EPO-alpha, EPO alpha, EPOalpha, h-EPO-alpha, rh-AEPO-alpha, recombinant human EPO-alpha, recombinant EPO-alpha, EPO.

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Molecular Weight: 21 kDa, observed 26-36 kDa in SDS-PAGE.

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Pathways: [JAK-STAT Signaling](#), [Hormone Activity](#), [Negative Regulation of intrinsic apoptotic Signaling](#), [Negative Regulation of Transporter Activity](#)

## Application Details

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Application Notes: Mature human EPO, containing 166 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 26-36 kDa in SDS-PAGE.

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

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Reconstitution: Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/mL.

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Buffer: Lyophilized after extensive dialysis against PBS.

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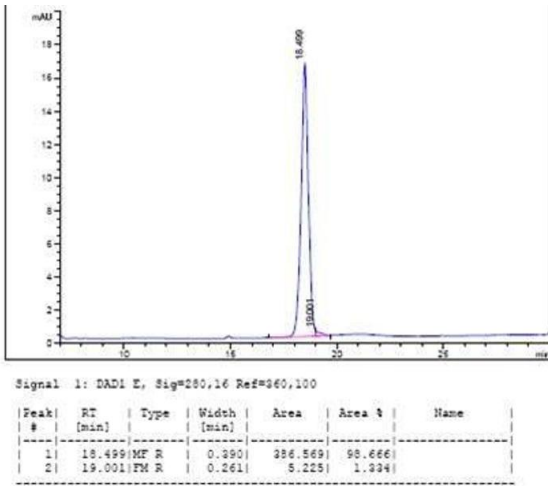
Storage: -80 °C

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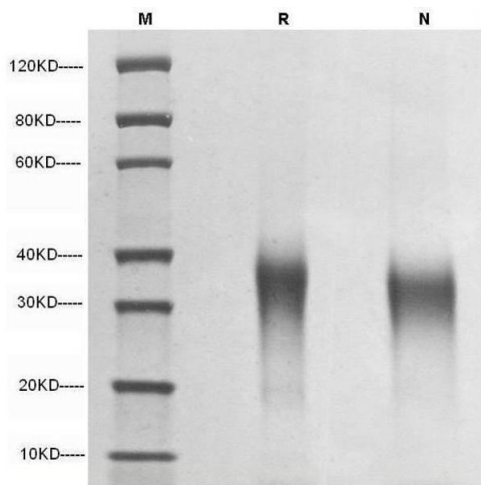
Storage Comment: Lyophilized recombinant human EPO remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, rhEPO should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

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Expiry Date: 6 months

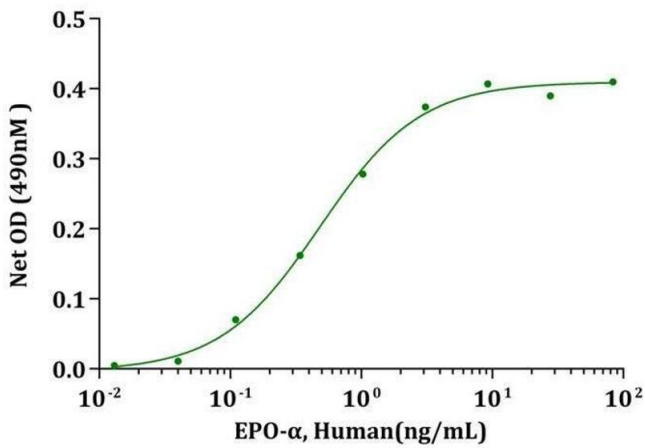


**Image 1.**



**SDS-PAGE**

**Image 2.** 5 µg of EPO-α, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



**Activity Assay**

**Image 3.** EPO-α, Human stimulates cell proliferation of TF-1 cells. The ED50 for this effect 0.45ng/mL.