

Bioactive

## EPO (Human) Recombinant Protein

Catalog # P7301

Size 10 ug

### Applications

#### Result of activity analysis

Result of activity analysis

□

### Specification

|                      |                                                                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description  | Human EPO (P01588, 28 a.a. - 193 a.a.) partial recombinant protein expressed in CHO cells.                                                                                                |
| Sequence             | APPRLICDSRVLERYLLEAKEAENITTGCAEHCSLNENITVPDTKVNIFYAWKRMEVGQQAVEVWQ<br>GLALLSEAVLRGQALLVNSSQPWEPLQLHVDKAVSGLRSLTLLRALGAQKEAISPPDAASAAPL<br>RTITADTFRKLFRVYSNFLRGKLKLYTGEACRTGDR            |
| Host                 | Mammals                                                                                                                                                                                   |
| Theoretical MW (kDa) | 21                                                                                                                                                                                        |
| Form                 | Lyophilized                                                                                                                                                                               |
| Preparation Method   | Mammalian cell (CHO) expression system                                                                                                                                                    |
| Purity               | > 95% as analyzed by SDS-PAGE.<br>> 95% as analyzed by HPLC.                                                                                                                              |
| Endotoxin Level      | < 0.2 EU/μg of protein by gel clotting method                                                                                                                                             |
| Activity             | ED <sub>50</sub> < 1.0 ng/mL, measured in a cell proliferation assay using TF-1 human erythroleukemic cells, co<br>responding to a specific activity of > 1.0 × 10 <sup>6</sup> units/mg. |

**Recommend Usage**

Biological Activity  
SDS-PAGE  
The optimal working dilution should be determined by the end user.

**Storage Buffer**

Lyophilized from PBS. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

**Storage Instruction**

Store at 4°C to 8°C for 1 week. For long term storage store at -20°C to -80°C.  
Aliquot to avoid repeated freezing and thawing.

**Note**

Result of activity analysis  
Result of activity analysis

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — EPO

**Entrez GeneID**[2056](#)**Protein Accession#**[P01588](#)**Gene Name**

EPO

**Gene Alias**

EP, MGC138142

**Gene Description**

erythropoietin

**Omim ID**[133170](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene is a member of the EPO/TPO family and encodes a secreted, glycosylated cytokine composed of four alpha helical bundles. The protein is found in the plasma and regulates red cell production by promoting erythroid differentiation and initiating hemoglobin synthesis. This protein also has neuroprotective activity against a variety of potential brain injuries and antiapoptotic functions in several tissue types. [provided by RefSeq]

**Other Designations**

epoetin

## Pathway

- [Cytokine-cytokine receptor interaction](#)
- [Hematopoietic cell lineage](#)
- [Jak-STAT signaling pathway](#)

## Disease

- [Amyotrophic lateral sclerosis](#)
- [Cardiovascular Diseases](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Diabetic Retinopathy](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Leukemia](#)
- [Myelodysplastic Syndromes](#)
- [Retinopathy of Prematurity](#)
- [Rhinitis](#)