

Recombinant human Erythropoietin/EPO protein

Catalog Number: ATGP3208

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

28-193aa

UniProt No.

P01588

NCBI Accession No.

NP_000790.1

Alternative Names

EPO, EP, MVCD2

PRODUCT SPECIFICATION

Molecular Weight

19.5 kDa (174aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range $\leq 0.5\text{ng/ml}$.

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

EPO, also known as erythropoietin, is a glycoprotein hormone in the type I cytokine family and is related to

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thrombopoietin. Its three N-glycosylation sites, four alpha helices, and N- to C-terminal disulfide bond are conserved across species. It is primarily produced in the kidney by a population of fibroblast-like cortical interstitial cells adjacent to the proximal tubules. This protein can be found in the plasma and regulates red cell production by promoting erythroid differentiation and initiating hemoglobin synthesis. It also has neuroprotective activity against a variety of potential brain injuries and anti-apoptotic functions in several tissue types. Recombinant human EPO, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

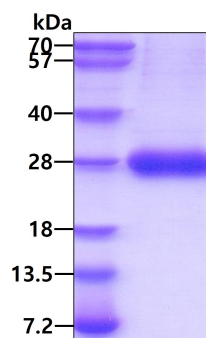
APRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNIFYA WKRMEVGQQA VEVWQGLALL SEAVLRGQAL
LVNSSQPWEP LQLHVDKAVS GLRSLTLLR ALRAQKEAIS PPDAASAAPL RTITADTRK LFRVYSNFLR GKLKLYTGEA
CRTGDR<LEHH HHHH>

General References

Koury, M.J., et al. (2005) *Exp. Hematol.* 33:1263.
Jelkmann W., et al. (2007) *Eur J Haematol.* 78:183-205

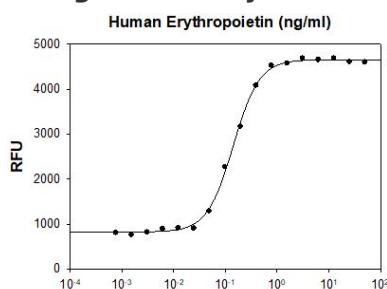
DATA

SDS-PAGE



3µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 range ≤ 0.5 ng/ml.