

Synonym

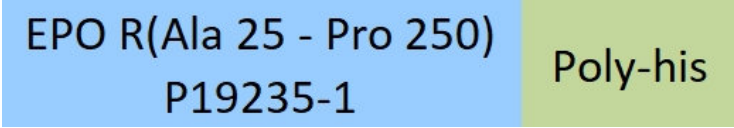
EPOR

Source

Human Erythropoietin R Protein, His Tag(EPR-H52H4) is expressed from human 293 cells (HEK293). It contains AA Ala 25 - Pro 250 (Accession # [P19235-1](#)).

Predicted N-terminus: Ala 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.7 kDa. The protein migrates as 30-32 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

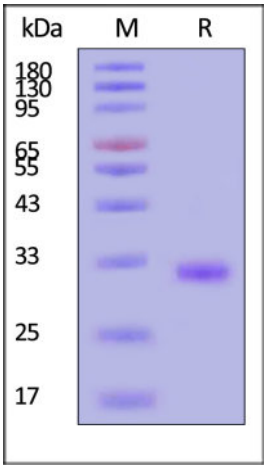
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

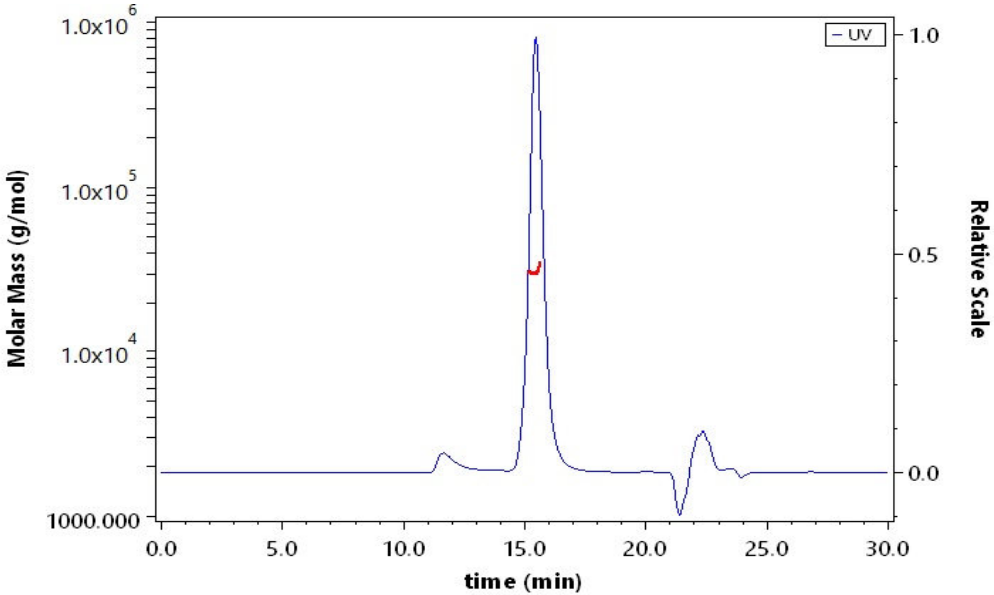
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Erythropoietin R Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS

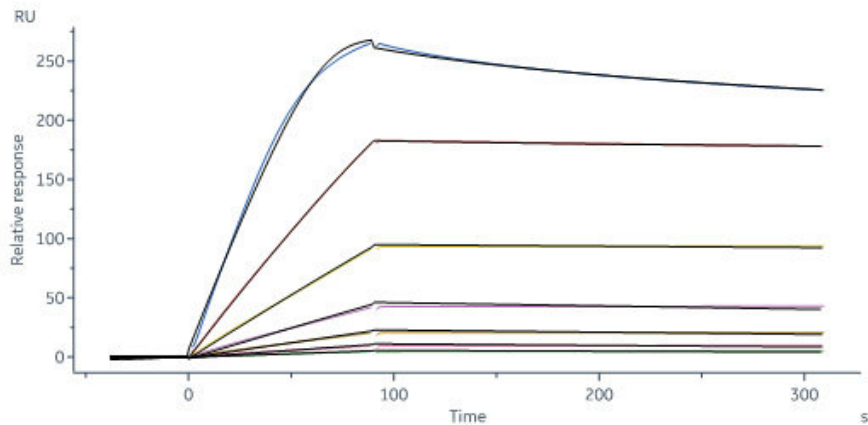


The purity of Human Erythropoietin R Protein, His Tag (Cat. No. EPR-H52H4) is more than 85% and the molecular weight of this protein is around 25-38 kDa verified by SEC-MALS.

[Report](#)

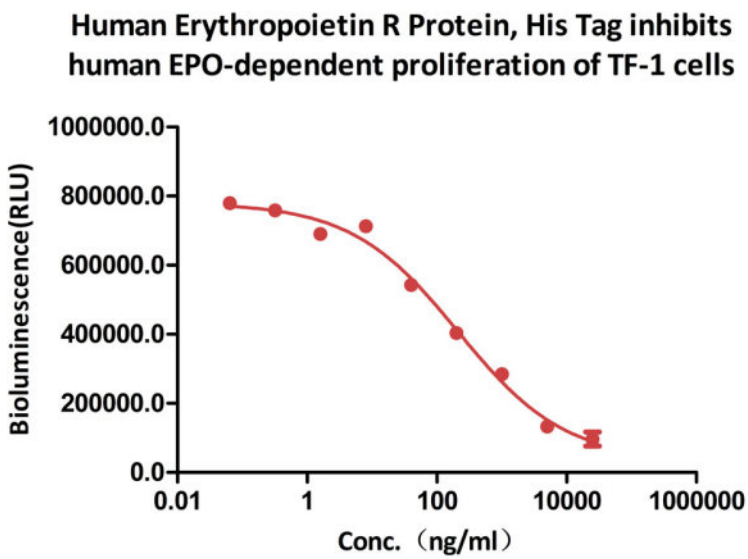
Bioactivity-SPR





Human Erythropoietin R Protein, His Tag (Cat. No. EPR-H52H4) immobilized on CM5 Chip can bind Human EPO Protein, premium grade (Cat. No. EPO-H4214) with an affinity constant of 0.142 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Bioactivity-CELL BASE



Human Erythropoietin R Protein, His Tag (Cat. No. EPR-H52H4) inhibits human erythropoietin/EPO-dependent proliferation of TF-1 cells. The EC50 is 211.1 ng/mL (Routinely tested).

Background

This gene encodes the erythropoietin receptor which is a member of the cytokine receptor family. Upon erythropoietin binding, this receptor activates Jak2 tyrosine kinase which activates different intracellular pathways including: Ras/MAP kinase, phosphatidylinositol 3-kinase and STAT transcription factors. The stimulated erythropoietin receptor appears to have a role in erythroid cell survival. Defects in the erythropoietin receptor may produce erythroleukemia and familial erythrocytosis. Dysregulation of this gene may affect the growth of certain tumors. Alternate splicing results in multiple transcript variants.

