

### **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**

EPO R(Ala 25 - Pro 250) P19235-1

Poly-his

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 <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

#### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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

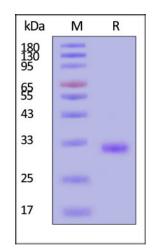
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

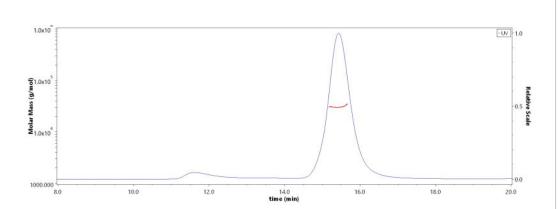
## **SDS-PAGE**



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 <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-SPR**

#### SEC-MALS



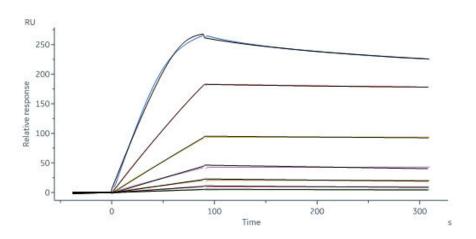
The purity of Human Erythropoietin R Protein, His Tag (Cat. No. EPR-H52H4) is more than 85% and the molecular weight of this protein is around 25-38 kDa verified by SEC-MALS.

Report

## Human Erythropoietin R / EPO R Protein, His Tag (MALS & SPR verified)

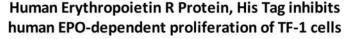


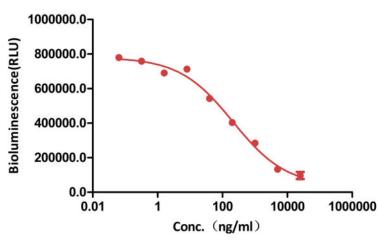




Human Erythropoietin R Protein, His Tag (Cat. No. EPR-H52H4) immobilized on CM5 Chip can bind Human EPO Protein, premium grade (Cat. No. EPO-H4214) with an affinity constant of 0.142 nM as determined in a SPR assay (Biacore 8K) (QC tested).

## **Bioactivity-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, phosphat.

## **Clinical and Translational Updates**

