

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein
EPOR, Erythropoietin Receptor.
Catalog # PBV11075r**Specification**

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein - Product infoPrimary Accession
Calculated MW[P19235](#)

This protein is fused with Fc fragment of human IgG1 at the C-terminus, has a calculated MW of 50.1 kDa. The predicted N-terminus is Ala 25. DTT-reduced Protein migrates as 55-60 kDa due to glycosylation. KDa

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein - Additional InfoGene ID
Gene Symbol
Other Names
EPOR, Erythropoietin Receptor.2057
EPORGene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Results

Human
HEK293 cells
SDS-PAGE; ≥92%
N/A;
Yes
Measured by its ability to inhibit Epo-dependent proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is typically 2 - 6 ng/ml in the presence of 0.2 U/ml of rhEpo-Fc.

Target/Specificity
EPOR/Erythropoietin Receptor**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in 50 mM tris, 100 mM glycine, pH 7.0. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein - Images

Human CellExp EPOR/Erythropoietin Receptor, human recombinant protein - Background

Erythropoietin (EPO) is the major glycoprotein hormone regulator of mammalian erythropoiesis, and is produced by kidney and liver in an oxygen-dependent manner. The biological effects of EPO are mediated by the specific erythropoietin receptor (EPOR) on bone marrow erythroblasts, which transmits signals important for both proliferation and differentiation along the erythroid lineage. EPOR is a type 1 single-transmembrane cytokine receptor, and belongs to the homodimerizing subclass which functions as ligand-induced or ligand-stabilized homodimers. EPOR pre-exists as dimers which upon binding of a 34 kDa ligand erythropoietin (EPO), changes its homodimerized state. These conformational changes result in the autophosphorylation of Jak2 kinases that are pre-associated with the receptor. Erythropoietin is necessary to maintain endothelial cells and to promote tumor angiogenesis, hence the dysregulation of EpoR may affect the growth of certain tumors. EpoR signaling prevents neuronal death and ischemic injury.

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Noguchi C.T., et al. Blood 78:2548-2556(1991).
Ehrenman K., et al. Exp. Hematol. 19:973-977(1991).
Nakamura Y., et al. Science 257:1138-1141(1992).