

Human CellExp™ EPOR/Erythropoietin Receptor, human recombinant

CATALOG #: 7454-10 10 µg
7454-50 50 µg

ALTERNATE NAMES: EPOR, Erythropoietin Receptor.

SOURCE: HEK 293 cells (Ala 25 – Cys 241)

PURITY: ≥ 92% by SDS-PAGE gel

MOL. WEIGHT: 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.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: 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.

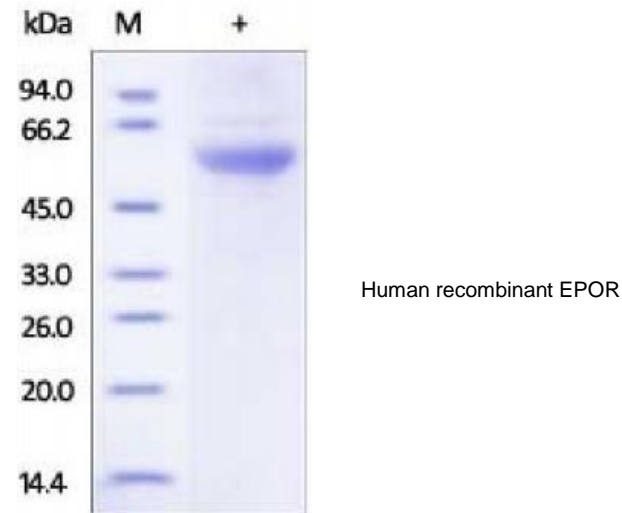
STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: 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.

DESCRIPTION: 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.

BIOLOGICAL ACTIVITY: 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.



RELATED PRODUCTS:

- EPO-alpha, human recombinant (Cat # 4763-50, -1000)
- EPO-alpha, human recombinant (Cat # 4764-10, -500)
- EPO-beta, human recombinant (Cat # 4766-500, -1000)
- EPO, Human CellExp™, human recombinant (Cat # 6447-10, -50)

FOR RESEARCH USE ONLY! Not to be used in humans.