This product is still under development. Please contact us if you have interest in this product. We will accelerate the development process accordingly and reserve this product for you as request.

Synonym

EPOR

Source

Human EPO R, Fc Tag (EPR-H5253) is expressed from human 293 cells (HEK293). It contains AA Ala 25 - Cys 241 (Accession # P19235-2). Predicted N-terminus: Ala 25

Molecular Characterization

EPO R(Ala 25 - Cys 241) P19235-2	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 50.1 kDa.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

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.

References

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(6) Wright GL, et al., 2004, FASEB J. 18 (9): 1031–3.

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.