HumanKine™ Erythropoietin, human recombinant, expressed in HEK 293 cells

Catalog Number H5166
Storage Temperature –20 °C

Synonym: EPO

Product Description
HumanKine™ EPO is expressed as a glycosylated 36 kDa monomer in human 293 cells. Production in human 293 cells offers authentic glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

Erythropoietin has been cloned from various species including human, murine, canine, and others. The mature proteins from the various species are highly conserved and exhibit greater than 80% amino acid sequence identity. EPO contains three N-linked glycosylation sites. The glycosylation of erythropoietin is required for the biological activities of erythropoietin in vivo.

EPO, produced primarily by the kidney, is the primary regulatory factor of erythropoiesis. It promotes the proliferation, differentiation, and survival of the erythroid progenitors. Erythropoietin stimulates erythropoiesis by inducing growth and differentiation of burst forming units and colony forming units into mature red blood cells. EPO produced by kidney cells is increased in response to hypoxia or anemia. The biological effects of erythropoietin are mediated by the erythropoietin receptor, which binds EPO with high affinity and is a potent EPO antagonist.

This product is lyophilized from a solution of 10 mM MES, pH 6.0, with 80 mM NaCl

ED₅₀: ≤5.0 ng/mL

The specific activity was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).

Purity: ≥95% (SDS-PAGE)
Endotoxin level: ≤1 EU/µg

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

Storage/Stability
Store the product at –20 °C. The lyophilized product remains active for one year at –20 °C.

Upon reconstitution, the cytokine can be stored at 2–8 °C for short term only, or at –20 °C to –80 °C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

HumanKine is a trademark of HumanZyme Inc.

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