

EPO

Recombinant Human Erythropoietin / EPO (Fc Tag)

Catalog No.	CRH423C-Fc	Quantity:	1.0 mg
	CRH423D-Fc		100 µg

Alternate Names: Erythropoietin, INN: Epoetin

Description: Erythropoietin is a member of the EPO / TPO family. It is a secreted, glycosylated cytokine composed of four alpha helical bundles. Erythropoietin can be found in the plasma and regulates red cell production by promoting erythroid differentiation and initiating hemoglobin synthesis. It also has neuroprotective activity against a variety of potential brain injuries and antiapoptotic functions in several tissue types. Erythropoietin is the principal hormone involved in the regulation of erythrocyte differentiation and the maintenance of a physiological level of circulating erythrocyte mass. It is produced by kidney or liver of adult mammals and by liver of fetal or neonatal mammals. Genetic variation in erythropoietin is associated with susceptibility to microvascular complications of diabetes type 2. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. It has a longer circulating half-life in vivo. Erythropoietin is being much misused as a performance-enhancing drug in endurance athletes.

UniProt ID: P01588

Protein Construction: A DNA sequence encoding the human EPO (Met1-Arg193) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: HEK293 Cells

Molecular Weight: The recombinant human EPO consists 404 amino acids with a predicted molecular mass of 45.1 kDa.

Formulation: Lyophilized from sterile PBS, pH 7.4 containing 5% trehalose, 5% mannitol, 0.01% Tween 80.

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per µg of the protein as determined by the LAL method

Biological Activity: Testing in progress

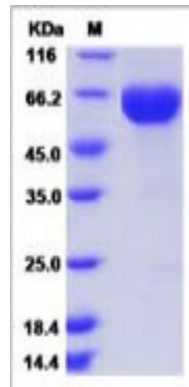
Predicted N-terminal: Ala 28

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.

Storage & Stability:

Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

SDS-PAGE



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