



Recombinant Protein Technical Manual

Recombinant Human EPO Receptor/EPOR Protein (Fc Tag)(Active) RPES1218

Product Data:

Product SKU: RPES1218

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000112.1

Protein Information:

Molecular Mass: 51.0 kDa

AP Molecular Mass: 55-60 kDa

Tag: C-Fc

Bio-activity: 1. Measured by its binding ability in a functional ELISA. Immobilized CD131 at 10 µg/ml (100 µl/well) can bind biotinylated recombinant human EPOR with a linear range of 0.16-4 µg/ml. 2. Measured by its ability to inhibit Epo-dependent proliferation of TF human erythroleukemic cells. The ED50 for this effect is 1-4 ng/ml in the presence of 0.1 U/mL Recombinant Human EPO.

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 8% sucrose, 0.5% Tween-20, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: EPO-R

Immunogen Information:

Sequence: Met-Pro 250

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/EPO Receptor) on bone marrow erythroblasts, which transmits signals important for both proliferation and differentiation along the erythroid lineage. EPOR protein is a type I single-transmembrane cytokine receptor, and belongs to the homodimerizing subclass which functions as ligand-induced or ligand-stabilized homodimers. EPOR signaling prevents neuronal death and ischemic injury. Recent studies have shown that EPO and EPOR protein may be involved in carcinogenesis, angiogenesis, and invasion.