

Erythropoietin Active Protein | EPO active protein

Erythropoietin Protein, Mouse, Recombinant (His Tag)

CATALOG #
AAA258227

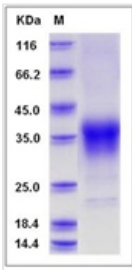
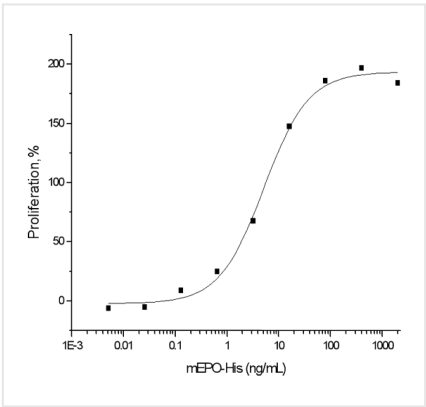
HOST
HEK293 Cells

PRODUCT SYNONYMS

Erythropoietin; Erythropoietin Protein; Mouse; Recombinant (His Tag); Mouse Erythropoietin/EPO Protein (His Tag); erythropoietin; EPO active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>96% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Arg19 2
Species	Mouse
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 27
Tag	C-His
Protein Construction	A DNA sequence encoding the mouse EPO (P07321)(Met1-Arg192) was expressed with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	1. Measured by its ability to bind biotinylated human EPOR-His in a functional ELISA. 2. Measured by its ability to bind mouse EPOR-Fch in a functional ELISA. 3. Measured by its ability to bind human EPOR & CD131-Fc in a functional ELISA. 4. Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 0.5-3ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 0.5-3 ng/ml.

ADDITIONAL INFORMATION

Related Product Information for EPO active protein	Background: 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.
References	Jelkmann W, et al. (2007) Erythropoietin after a century of research: younger than ever. Eur J Haematol. 78 (3):183-205.Miyake T, et al. (1997) Purification of human erythropoietin. J Biol Chem. 252(15):5558-64.Haroon ZA, et al. (2003) A novel role for erythropoietin during fibrin-induced wound-healing response. Am J Pathol. 163(3):993-1000.Siren AL, et al. (2001) Erythropoietin prevents neuronal apoptosis after cerebral ischemia and metabolic stress. Proc Natl Acad Sci. 98(7):4044-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	119528
NCBI GeneID	13856
UniProt Accession #	P07321
Molecular Weight	21,365 Da
NCBI Official Full Name	Erythropoietin
NCBI Official Synonym Full Names	erythropoietin
NCBI Official Symbol	Epo
NCBI Protein Information	erythropoietin
UniProt Protein Name	Erythropoietin
UniProt Gene Name	Epo
UniProt Entry Name	EPO_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-epo-active-protein/erythropoietin/258227>