Human EPO protein, His and GST tag (active)

Cat. No. GTX00422-pro

Applications	ELISA, Functional Assay
Species	Human

Package
10 µg

Applications

Application Note

Erythropoietin (EPO), also known as hematopoietin or hemopoietin, is a glycoprotein cytokine secreted by the kidney in response to cellular hypoxia; it stimulates red blood cell production (erythropoiesis) in the bone marrow. Erythropoietin is an essential hormone for red blood cell production. EPO can cooperate with various other growth factors involved in the development of erythroid lineage from multipotent progenitors. To test the effect of EPO on cell proliferation, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 5000 cells/well with 1% serum standard 1640 including various concentrations of recombinant human EPO. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37ºC. Proliferation of TF-1 cells after incubation with EPO for 72h observed by inverted microscope, and cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant EPO for 72h. EPO significantly increased cell viability of TF-1 cells.

Observed MW (kDa)	48 kDa.

Properties

Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris (pH8.0) and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris (pH8.0), 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4ºC. For long-term storage, store at -20ºC or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag and GST-Tag; Ala28~Arg193 (NP_000790.2)
Expression System	E. coli
Purity	> 90%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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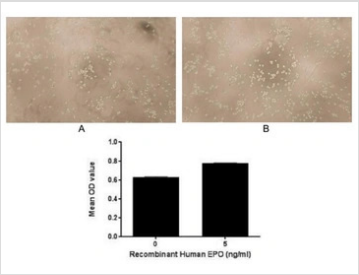
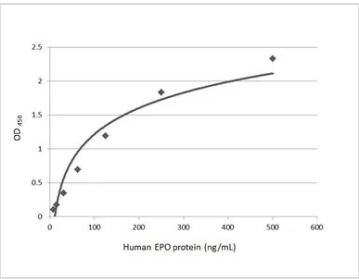
DATA IMAGES



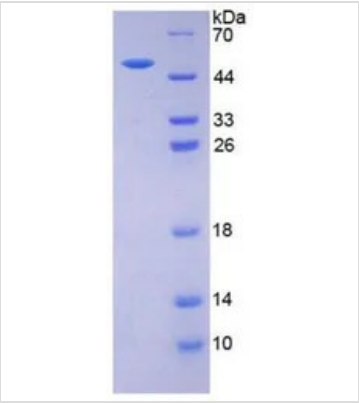
GTX00422-pro Functional Assay Image

Cell proliferation effect of GTX00422-pro Human EPO protein (active), cell viability was measured by cell Counting Kit-8 (CCK-8).
(A) Unstimulated TF-1 cells cultured in RPMI-1640 for 72hrs.
(B) TF-1 cells cultured in RPMI-1640, stimulated with 5 ng/ml EPO for 72hrs.



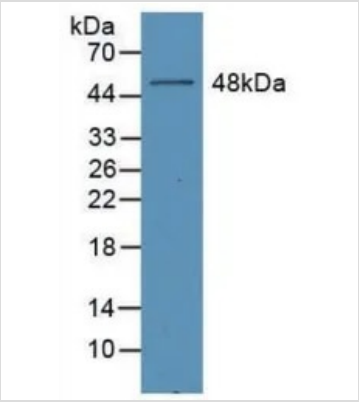
GTX00422-pro ELISA Image

Indirect ELISA analysis was performed by coating the plate with recombinant E.coli expressed, full-length human EPO protein, His and GST tag (active) (GTX00422-pro) (500-7.81 ng/mL). Coated protein was probed with EPO antibody (GTX100813) (1 µg/mL). Goat anti-rabbit IgG antibody (HRP) (GTX213110-01) (1:10000) was used to detect the bound primary antibody.



GTX00422-pro Image

SDS-PAGE analysis of GTX00422-pro Human EPO protein (active).



GTX00422-pro Image

WB analysis of GTX00422-pro Human EPO protein (active).

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