

## Human GM-CSF protein, His tag (active)

## Cat. No. GTX00082-pro

Applications	Functional Assay	References ( 1 )
Species	Human	Package 10 µg

## Applications

## Application Note

TF-1, the human erythroleukemia cell line, provides a good system for detecting the activity of GM-CSF for it is a cell line of immature erythroid origin that completely depends on interleukin 3 (IL-3) or granulocyte-macrophage colony-stimulating factor (GM-CSF) for long term growth. As reported, GM-CSF was also able to induce differentiation of human monoblastic leukemia cell line U937. TF-1 cells and U937 cells were incubated in the presence of various concentrations of rhGM-CSF, then cells were observed by inverted microscope. Cell proliferation of TF1 cells after incubation with GM-CSF (10 ng/ml) was for 3 days, and for U937 cells incubated with GM-CSF (10 ng/ml) was for 5 days.

Observed MW (kDa) 19-26 kDa.

## Properties

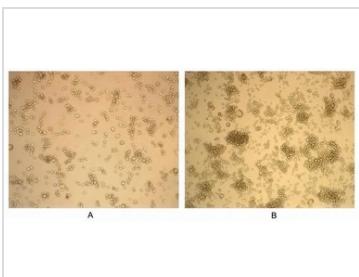
Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His-Tag; Ala18~Glu144 (NP_000749.2)
Expression System	HEK293 cells
Purity	> 95%
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

**GTX00082-pro Functional Assay Image**

Cell proliferation effect of GTX00082-pro Human GM-CSF protein (active).

(A) Unstimulated TF-1 cells cultured in RPMI-1640.

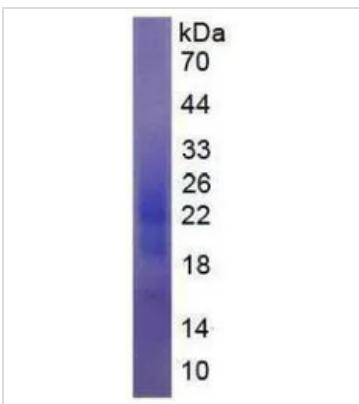
(B) TF-1 cells cultured in RPMI-1640, stimulated with GM-CSF (2 ng/ml).

**GTX00082-pro Functional Assay Image**

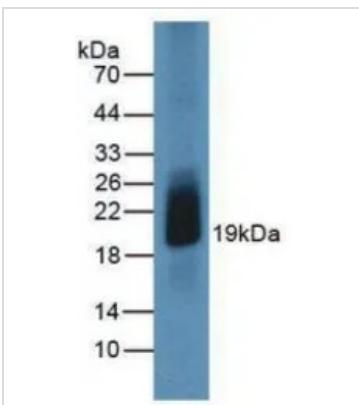
Cell differentiation effect of GTX00082-pro Human GM-CSF protein (active).

(A) Unstimulated U937 cells cultured in RPMI-1640.

(B) U937 cells cultured in RPMI-1640, stimulated with GM-CSF (10 ng/ml).

**GTX00082-pro Image**

SDS-PAGE analysis of GTX00082-pro Human GM-CSF protein (active).

**GTX00082-pro Image**

WB analysis of GTX00082-pro Human GM-CSF protein (active).



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