

Human IL7 protein, His tag (active)

Cat. No. GTX00118-pro

Applications	Functional Assay
Species	Human

Package

10 µg

Applications

Application Note

Gremlin (GREM1) is an inhibitor in the TGF beta signaling pathway. GREM1 and other BMP antagonists are important in the survival of cancer stroma survival and proliferation in some cancers. The protein expression is found in many cancers and is thought to play important roles in uterine cervix, lung, ovary, kidney, breast, colon, pancreas, and sarcoma carcinomas. A proliferation assay was conducted to detect the bioactivity of recombinant human GREM1 using A549 cells. Briefly, A549 cells were seeded into triplicate wells of 96-well plates at a density of 5000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM prior to the addition of various concentrations of GREM1. After incubated for 96h, 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 37°C. Proliferation of A549 cells after incubation with GREM1 for 96h observed by inverted microscope. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant GREM1 for 96h. And GREM1 significantly increased cell viability of A549 cells.

Observed MW (kDa)	21 kDa.
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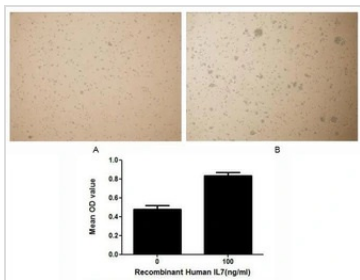
Properties

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; Asp26~His177 (NP_000871.1)
Expression System	E. coli
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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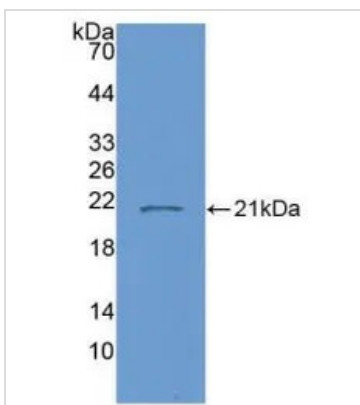
DATA IMAGES

**GTX00118-pro Functional Assay Image**

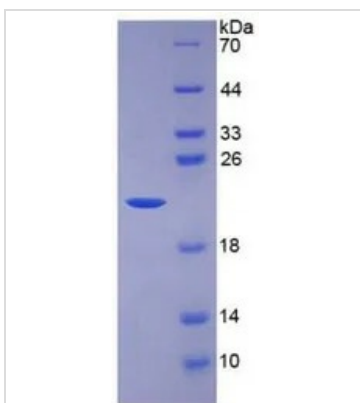
Cell proliferation effect of GTX00118-pro Human IL7 protein (active). Cell viability was measured by Cell Counting Kit-8 (CCK-8).

(A) Unstimulated Jurkat cells cultured in RPMI-1640 for 72hrs.

(B) Jurkat cells cultured in RPMI-1640, stimulated with 100 ng/ml IL7 for 72hrs.

**GTX00118-pro Image**

WB analysis of GTX00118-pro Human IL7 protein (active).

**GTX00118-pro Image**

SDS-PAGE analysis of GTX00118-pro Human IL7 protein (active).



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