

Active Gremlin 1 (GREM1) Instruction Manual

SBPC080Mu01

Mus musculus (Mouse)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 90%
Isoelectric Point	9.1
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

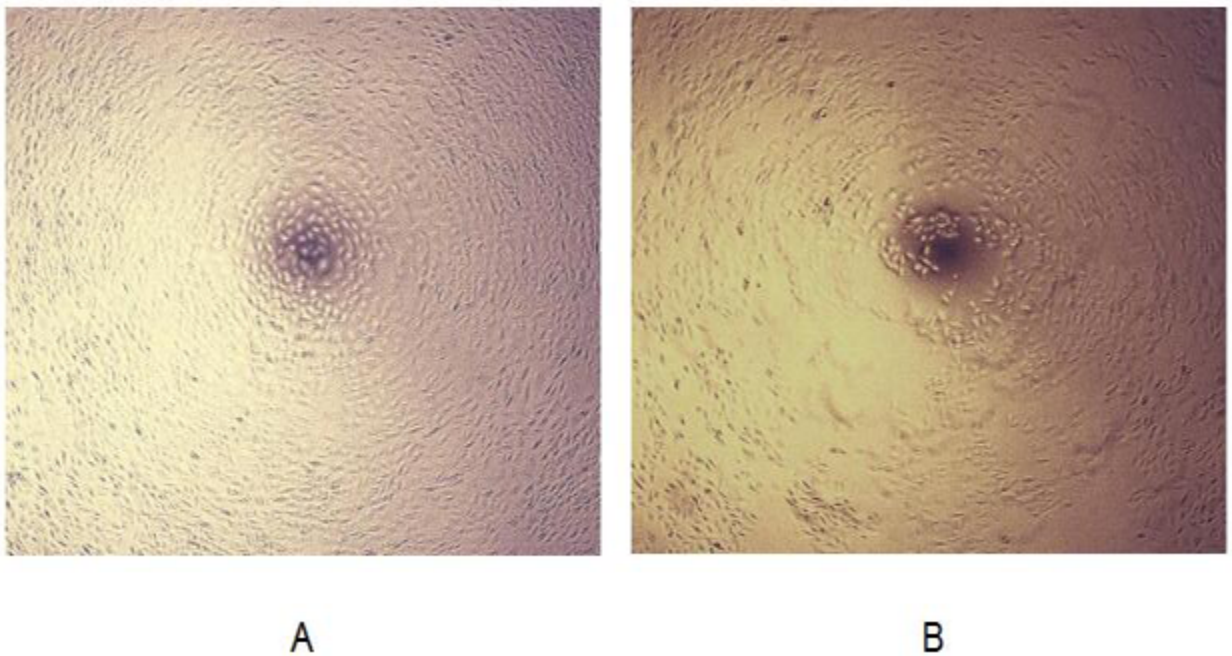


Figure. Cell proliferation of A549 cells after stimulated with GREM1. Gremlin (GREM1) is an inhibitor in the TGF beta signaling pathway. GREM1 and other BMP antagonists are important in the survival of cancer stroma survival and proliferation in some cancers. The protein expression is found in many cancers 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 mouse GREM1 using A549 cells. Briefly, A549 cells were seeded into triplicate wells of 96-well plates at a density of 5,000 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 μ L 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 $^{\circ}$ C. Proliferation of A549 cells after incubation with GREM1 for 96h observed by inverted microscope was shown in Figure1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant GREM1 for 96h. The result was shown in Figure 2. It was obvious that GREM1 significantly increased cell viability of A549 cells. (A) A549 cells cultured in DMEM, stimulated with 0.001ng/mL GREM1 for 96h; (B) Unstimulated A549 cells cultured in DMEM for 96h.

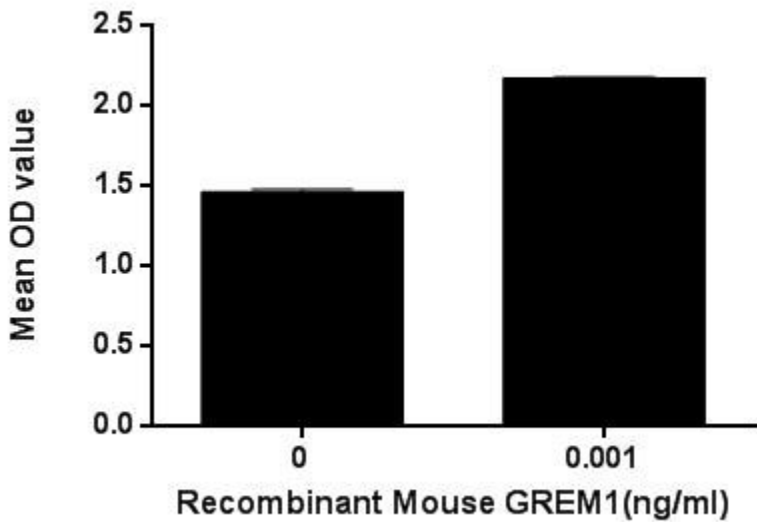


Figure. Cell proliferation of A549 cells after stimulated with GREM1.

USAGE

Reconstitute in ddH₂O to a concentration ≤ 0.1 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8 $^{\circ}$ C for one month. Aliquot and store at -80 $^{\circ}$ C for 12 months.

STABILITY

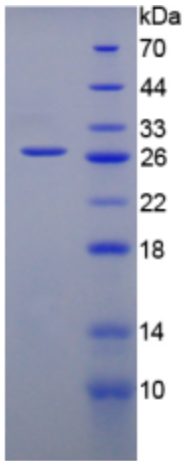


Figure. SDS-PAGE

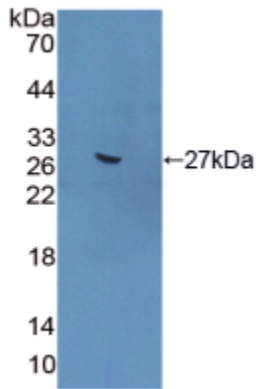


Figure. Western Blot

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.