

Active Epidermal Growth Factor (EGF) Instruction Manual

SBPA146Ra01

Rattus norvegicus (Rat)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 95%

Isoelectric Point

6.7

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

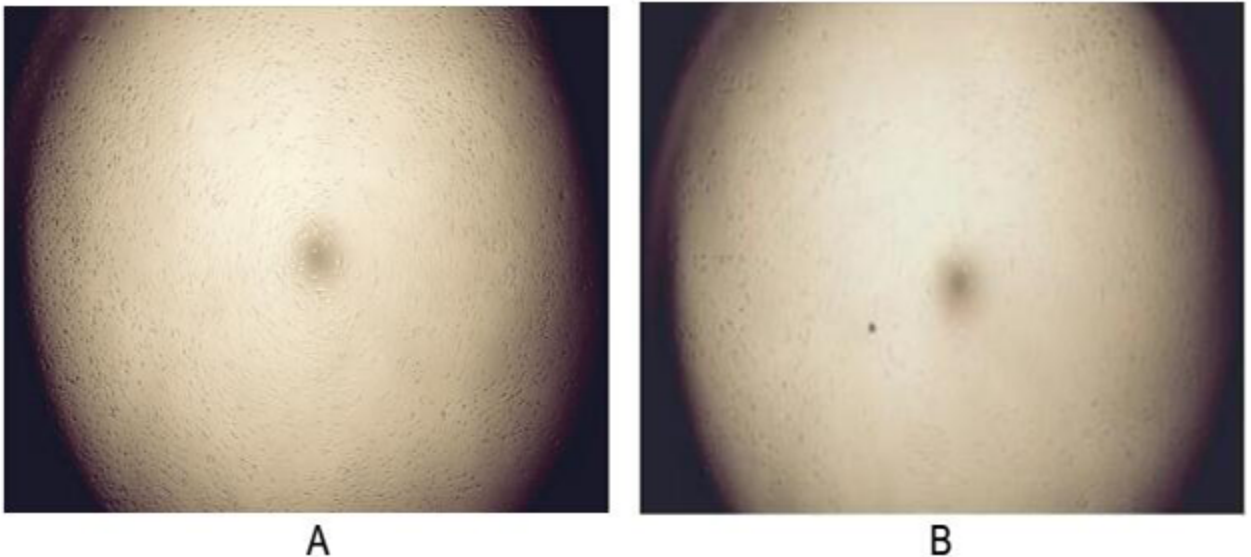


Figure. Cell proliferation of 3T3 cells after stimulated with EGF. Epidermal growth factor (EGF) binding to EGFR, results in cellular proliferation, differentiation, and survival. To test the effect of EGF on cell proliferation, 3T3 fibroblasts cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 1% serum standard DMEM prior to the addition of various concentrations of recombinant rat EGF. 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°C. Proliferation of 3T3 cells after incubation with EGF for 96h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant EGF for 96h. The result was shown in Figure 2. It was obvious that EGF significantly increased cell viability of 3T3 cells.

- (A) 3T3 cells cultured in DMEM, stimulated with 1ng/mL EGF for 96h;
(B) Unstimulated 3T3 cells cultured in DMEM for 96h.

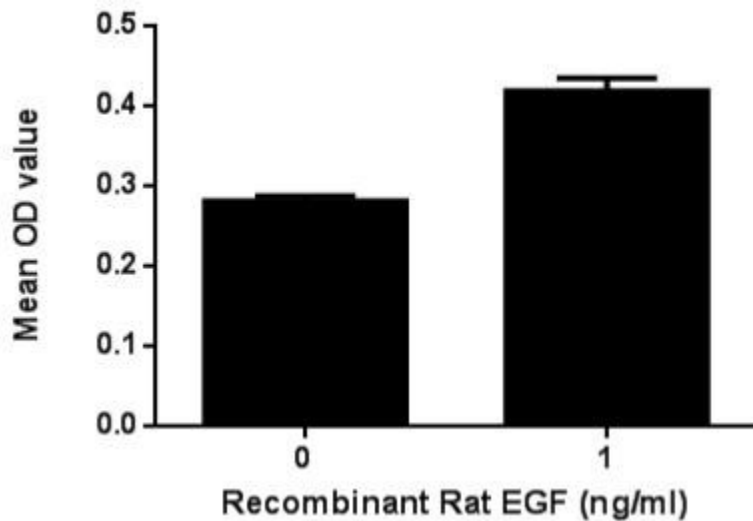


Figure. Cell proliferation of 3T3 cells after stimulated with EGF.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

ATCGTAAACAGGATGCGCGCGTGTGATGGGTACTGCTCAATGGTGGGCTGCAATGATGTTGAAATCGTGGACCGCTAGTGTGCAACTGTGTCATTGGCTATAATGGAGAAAGATGTCAGCAACGAGACTTAAGTTGGTGGAGCTGGGC
NSNTGCPPSYDGYCLNGGVCMYVESVDRYVCNCVIGYIGERCQHRDLRWVWKL R

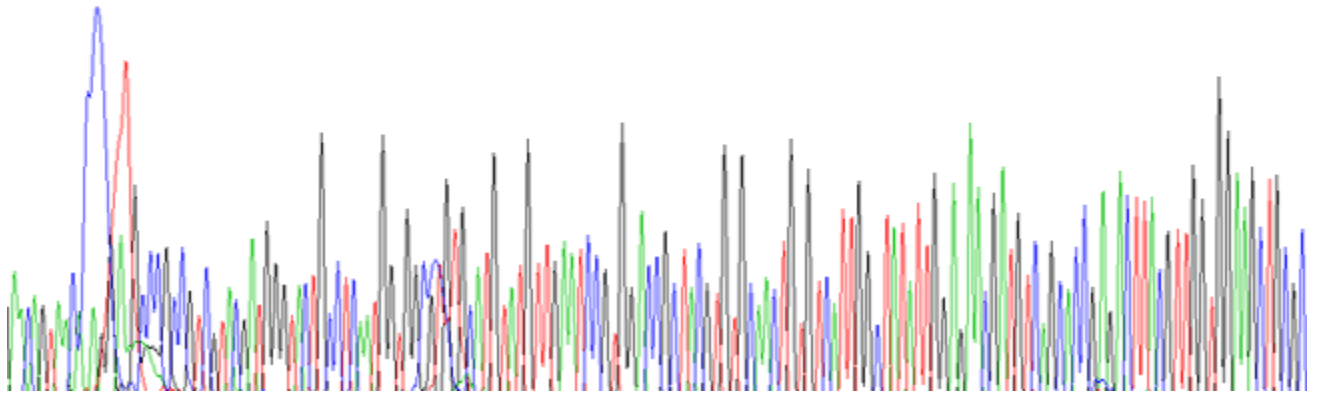


Figure. Gene Sequencing (Extract)

Image

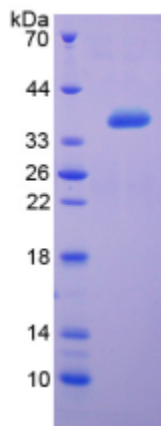


Figure. SDS-PAGE

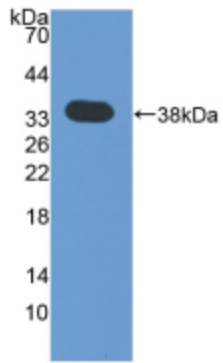


Figure. Western Blot

[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.