

Active Epidermal Growth Factor (EGF) Instruction Manual

SBPA146Hu02

Homo sapiens (Human)

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

> 90%

Isoelectric Point

4.8

Applications

Cell culture; Activity Assays.

ACTIVITY TEST



A

B

Figure 1. Cell proliferation of 3T3 cells after stimulated with EGF.

(A) 3T3 cells cultured in DMEM, stimulated with 1ng/mL EGF 72h;

(B) Unstimulated 3T3 cells cultured in serum-free DMEM for 72h.

Epidermal growth factor (EGF) is a growth factor that stimulates cell growth, proliferation, and differentiation by binding to its receptor EGFR. To test the effect of EGF on cell proliferation of 3T3 fibroblasts, 3T3 cells were seeded into triplicate wells of 96-well plates at a density of 2, 000cells/well and allowed to attach

overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of EGF. After incubated for 72h, 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 measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37 $^{\circ}$ C .

Cell proliferation of 3T3 cells after incubation with EGF for 72h observed by inverted microscope was shown in Figure 1.

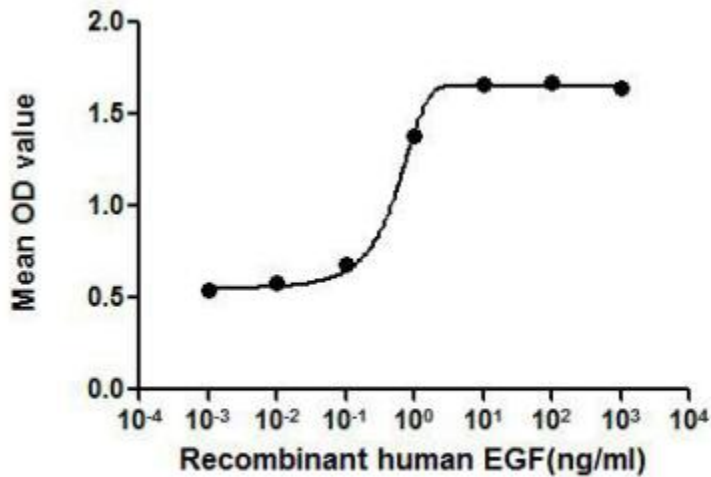


Figure 2. The dose-effect curve of EGF on 3T3 cells.

The dose-effect curve of EGF was shown in Figure 2. It was obvious that EGF significantly promoted cell proliferation of 3T3 cells. The ED50 for this effect is typically 0.9848 to 2.958ng/mL.

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 $^{\circ}$ C for one month. Aliquot and store at -80 $^{\circ}$ 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

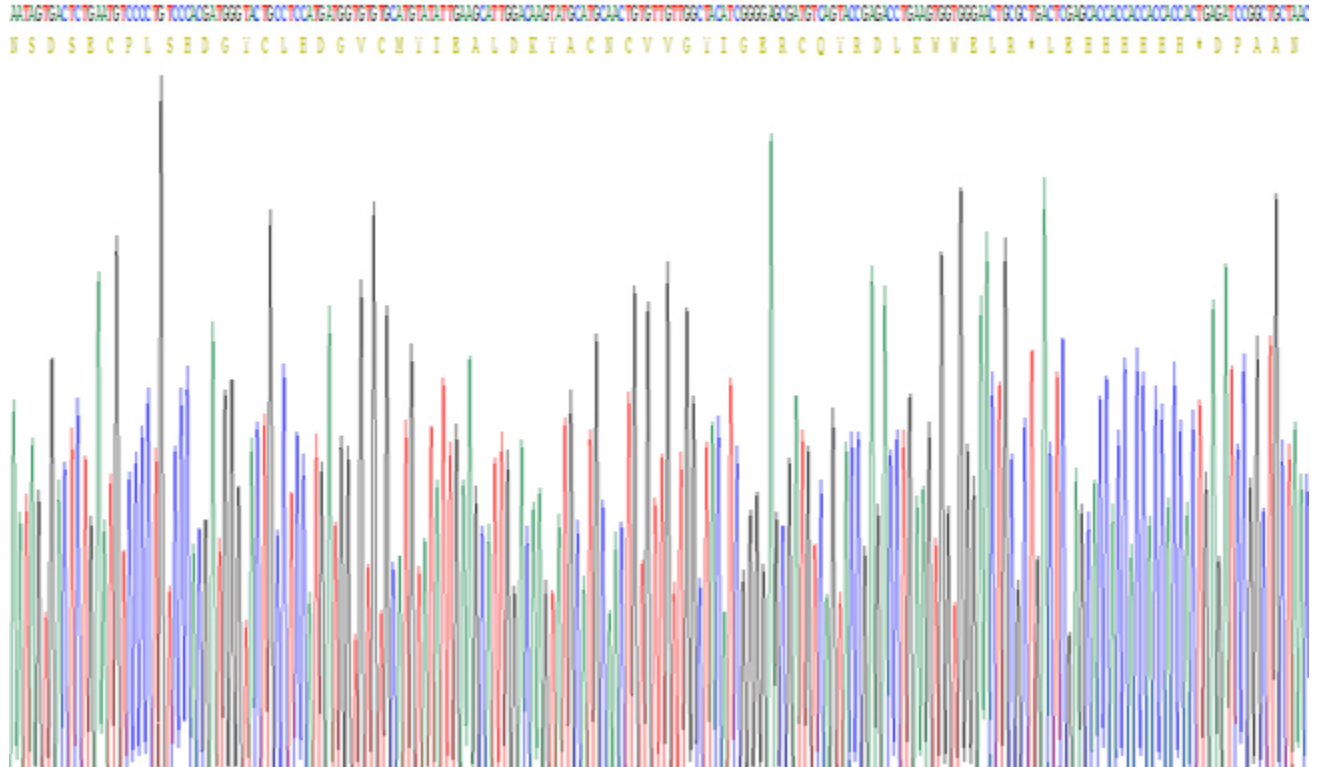


Figure. Western Blot; Sample: Recombinant EGF, Human.

[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.