

Active Interleukin 35 (IL35) Instruction Manual

SBPC291Hu01

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

> 97%

Isoelectric Point

8.7

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

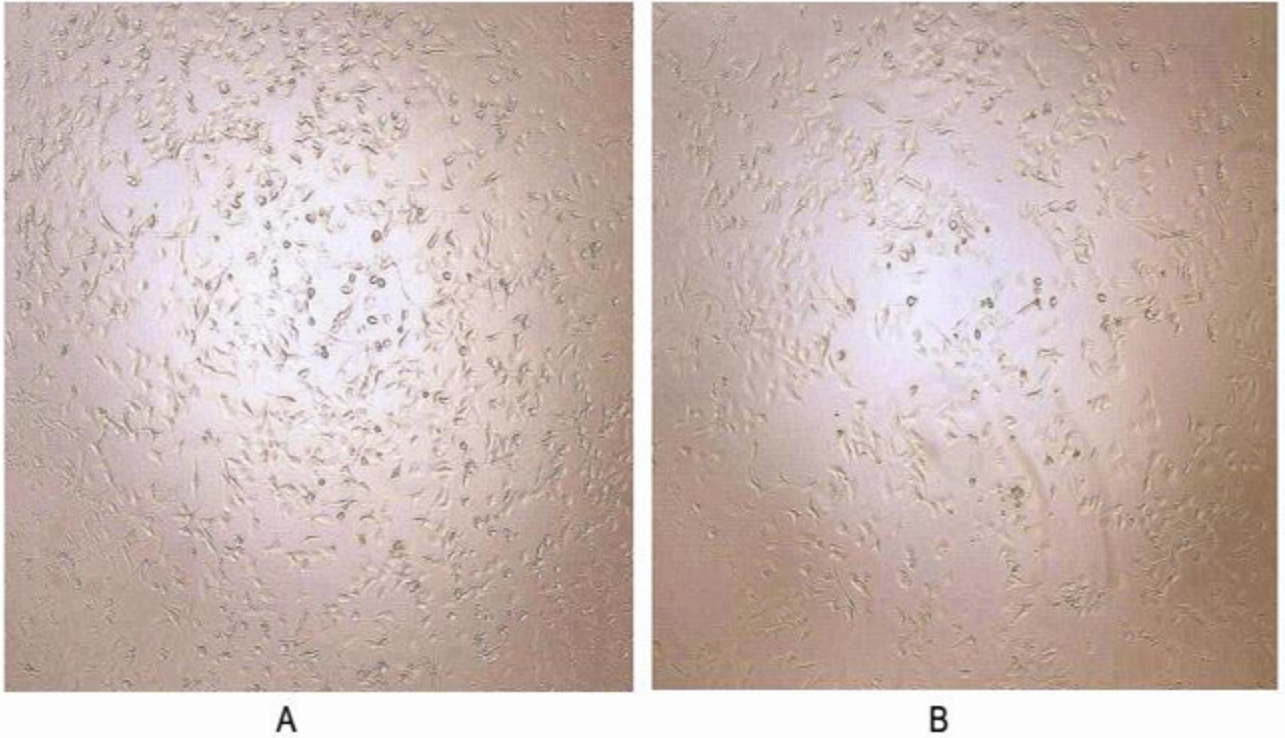


Figure 1. Cell proliferation of PANC-1 cells after stimulated with IL35.

(A) PANC-1 cells cultured in DMEM, stimulated with 1000ng/mL IL35 for 48h;

(B) Unstimulated PANC-1 cells cultured in DMEM for 48h.

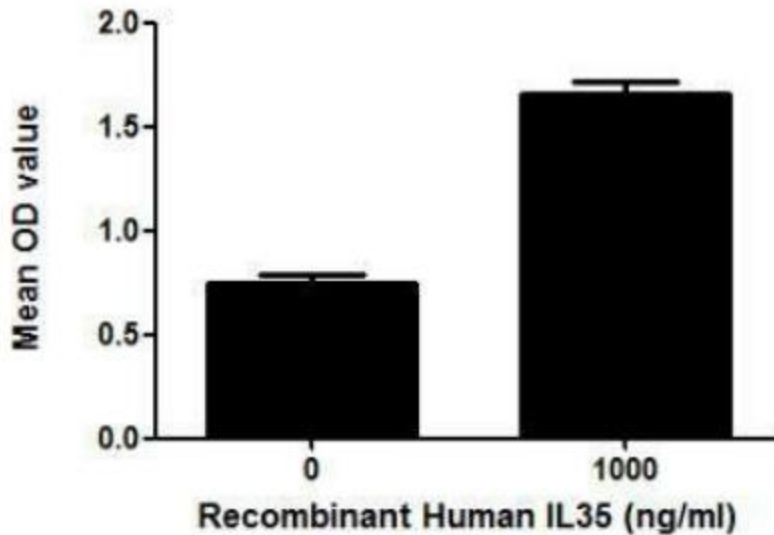


Figure 2. Cell proliferation of PANC-1 cells after stimulated with IL35.

IL35 (Interleukin 35) is an IL-12 family cytokine, which is a dimeric protein composed of IL-12 α and IL-27 β chains. IL35 is thought to mediate the immune inhibitory function of regulatory T cells and has been proven to promotes pancreas cancer growth through enhancement of proliferation and inhibition of apoptosis. Thus, proliferation assay of IL35 was conducted using PANC-1 cells. Briefly, PANC-1 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of recombinant human IL35. After incubated for 48h, 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 PANC-1 cells after incubation with IIL35 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with human recombinant IL35 for 48h. The result was shown in Figure 2. It was obvious that IL35 significantly increased cell viability of PANC-1 cells.

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

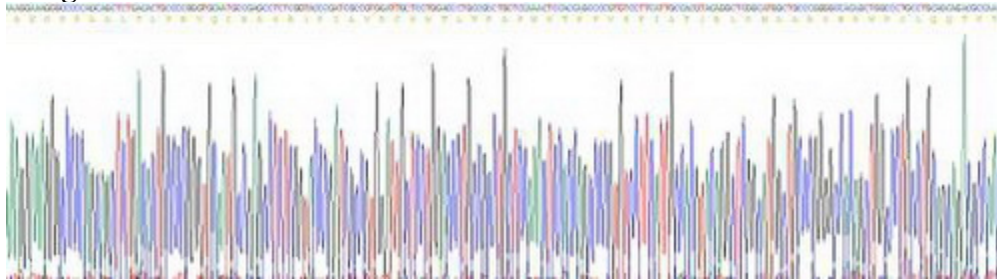


Figure. SDS-PAGE; Sample: Active recombinant IL35, Human.

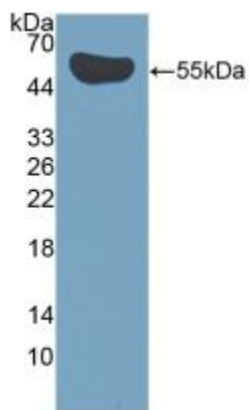


Figure. Western Blot; Sample: Recombinant IL35, Human.

[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.

