

Active Interleukin 11 (IL11)

Instruction Manual

SBPA036Hu01

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

11.3

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

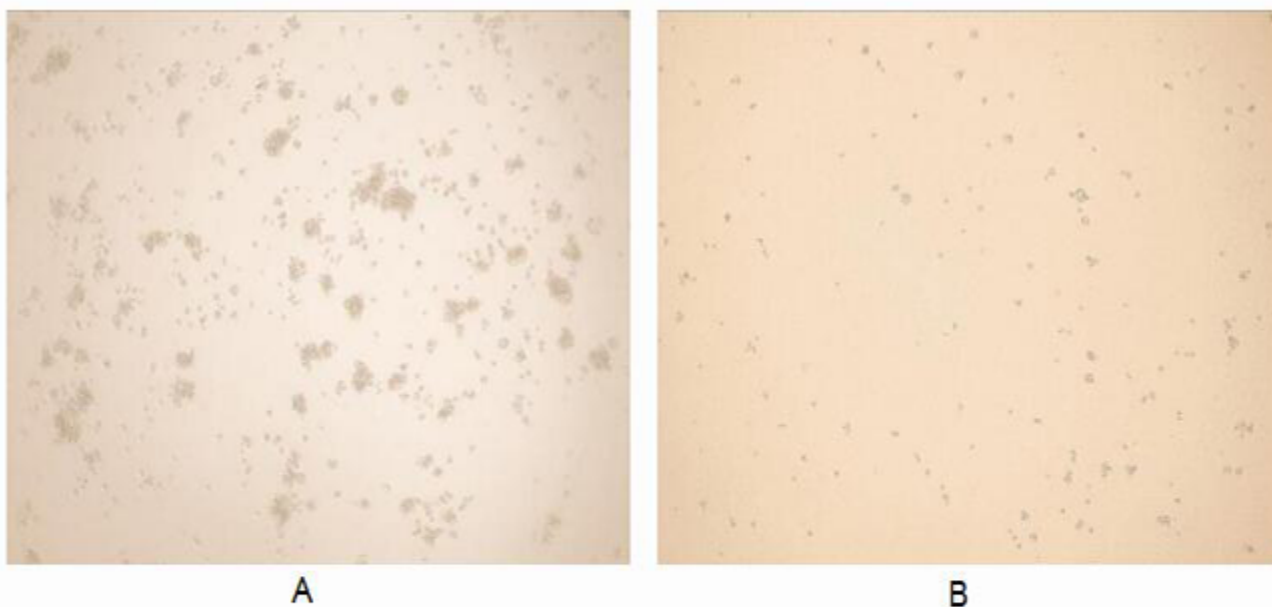


Figure 1. Cell proliferation of Jurkat cells after stimulated with IL11.

(A) Jurkat cells cultured in RPMI-1640, stimulated with 100ng/mL IL11 for 72h;

(B) Unstimulated Jurkat cells cultured in RPMI-1640 for 72h.

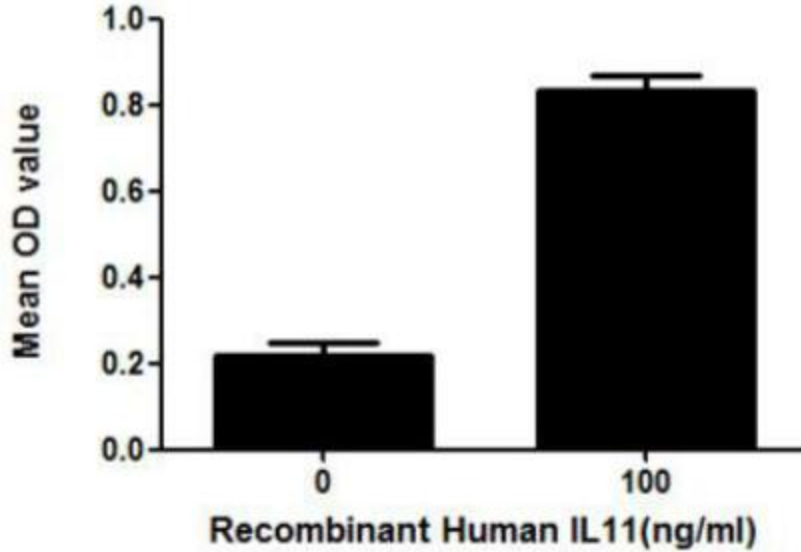


Figure 2. Cell proliferation of Jurkat cells after stimulated with IL11.

IL11 (Interleukin-11) is a multifunctional cytokine first isolated from bone marrow-derived stromal cells. It stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased platelet production. Besides, IL11 is reported to induce the proliferation of human T-cells, thus, a proliferation assay was conducted to detect the bioactivity of human recombinant IL11 using Jurkat cells. Briefly, Jurkat cells were seeded into triplicate wells of 96-well plates at a density of 10,000 cells/well in RPMI-1640 with the addition of various concentrations of IL11. 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 the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of Jurkat cells after incubation with IL11 for 72h observed by inverted microscope was shown in Figure 1. The CCK-8 data was shown in Figure 2. It was obvious that IL11 significantly promoted cell proliferation of Jurkat cells.

USAGE

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

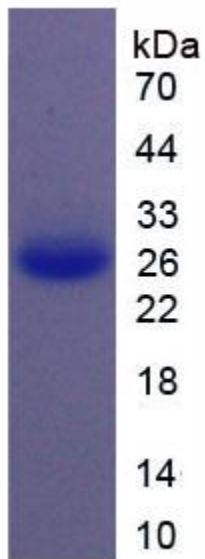
STORAGE

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



SDS-PAGE Image

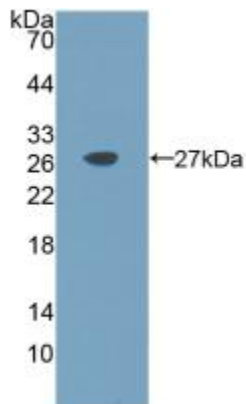


Figure. Western Blot; Sample: Recombinant IL11, Human.

[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.