

Active Tumor Necrosis Factor Beta (TNF β) Instruction Manual

SBPA084Hu01

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

9.3

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

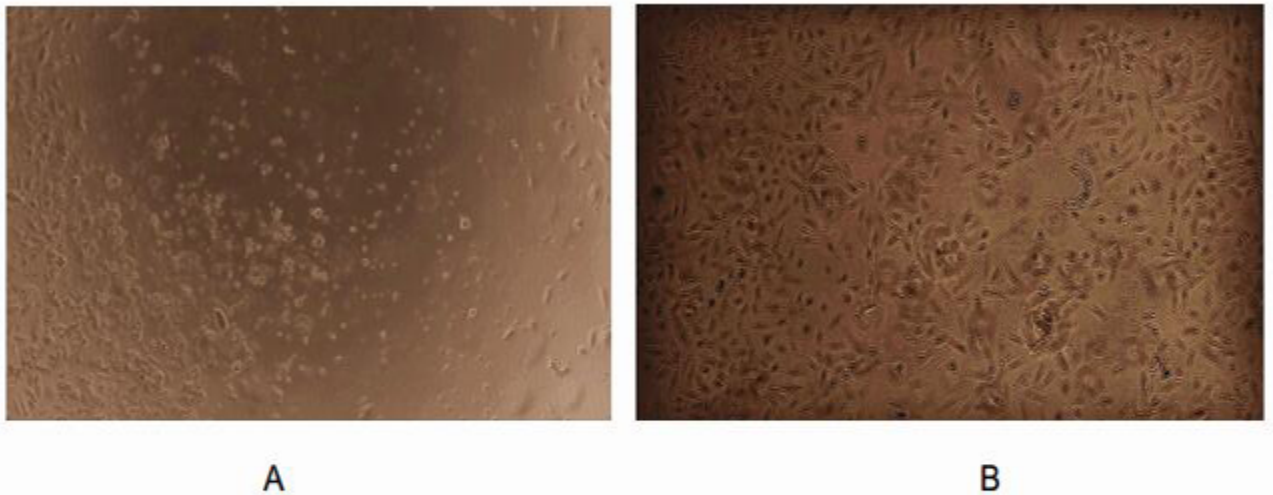


Figure 1. Effect of TNF- β on A549 cells.

(A) A549 cells cultured in DMEM, stimulated with 10ng/mL TNF- β for 72h;

(B) A549 cells cultured in DMEM for 72h.

TNF- β , a member of the tumor necrosis factor family, is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells. The biological effects of TNF- β are very similar to TNF- α , due to the similarity of molecular structure and the receptors. As reported, TNF- β could inhibit the proliferation and induce necrosis of A549 cells, and the concentration of IL-1 β in cell supernatant will increase after stimulation. Therefore, A549 cells were incubated in DMEM with TNF- β (10ng/mL) for 8h, 24h, 48h, 72h, then

cells were observed by inverted microscope and IL-1 β was detected in the cell supernatant by ELISA .
Cell necrosis after incubation with TNF- β (10ng/mL) for 72h was shown in Figure 1.

Table 1. Effect of TNF- β on A549 cells by ELISA.

Sample (cell supernatant of A549 cells)	Concentration of IL-1β (ng/mL)
Stimulated with TNF- β (10ng/mL)	95.9
Unstimulated	4.9

The production of IL-1 β after incubation with TNF- β (10ng/mL) for 8h is shown in Table 1.

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

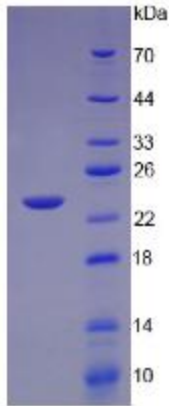


Figure. SDS-PAGE

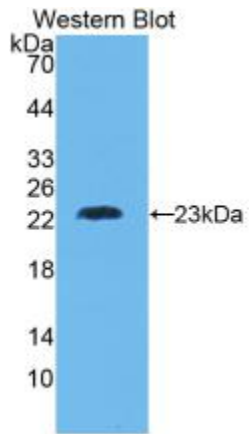


Figure. Western Blot; Sample: APA134Hu01; Antibody: PAA134Hu01

[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.