

Active Tumor Necrosis Factor Alpha (TNF α) Instruction Manual

SBPA083Hu01

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

> 95%

Isoelectric Point

7.0

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

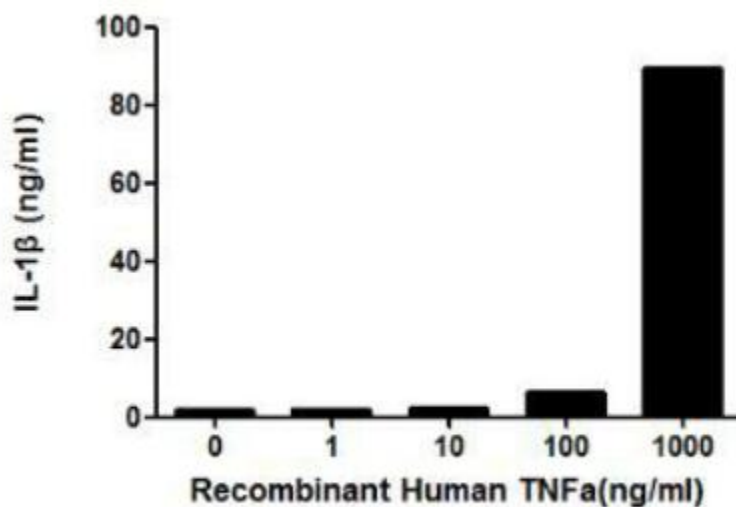


Figure 1. IL-1 β level in the cell supernatant of A549 cells up-regulated by TNF α .

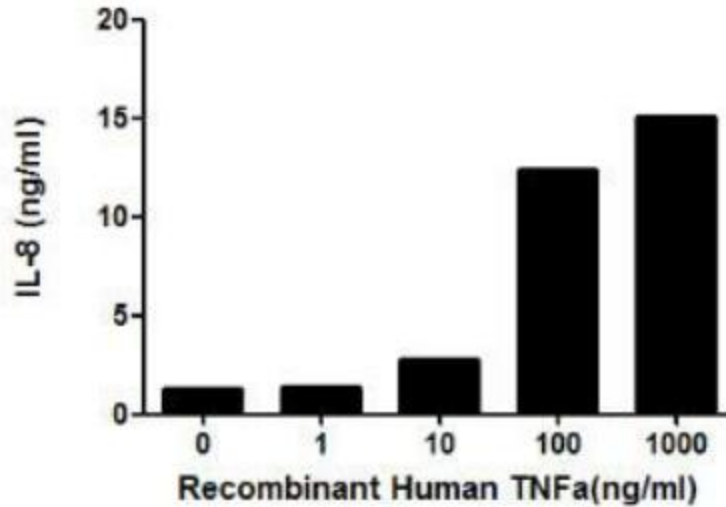


Figure 2. IL-8 level in the cell supernatant of A549 cells up-regulated by TNFa.

TNFa (Tumor necrosis factor), is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It has been reported that TNFa can inhibit the proliferation and induce apoptosis of A549 cells, besides, the concentration of IL-1 β and IL-8 in cell supernatant will increase after stimulation. Therefore, a stimulation assay of TNFa was conducted using A549 cells. Briefly, A549 cells were incubated in DMEM with different concentrations of TNFa (1ng/mL, 10ng/mL, 100ng/mL, 1000ng/mL) for 8h, after which the concentration of IL-1 β and IL-8 in the cell supernatant were detected by ELISA. IL-1 β and IL-8 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL-1 β , the data was shown in Figure 1 and Figure 2 separately.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (PH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

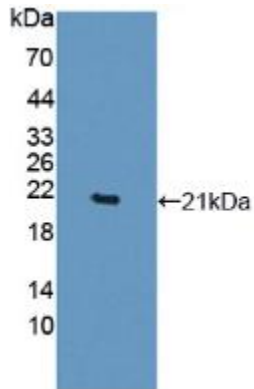
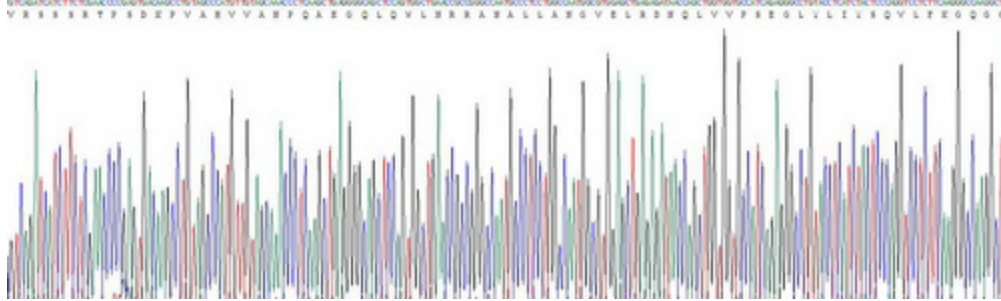
Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

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



[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.