

Active Interleukin 6 (IL6) Instruction Manual

SBPA051Hu61

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

6.2

Applications

Cell culture; Activity Assays.

ACTIVITY TEST



A

B

Figure 1. The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells .

(A) MCF-7 cells cultured in serum-free DMEM, stimulated with 100ng/mL IL-6 for 96h;

(B) Unstimulated MCF-7 cells cultured in serum-free DMEM for 96h.

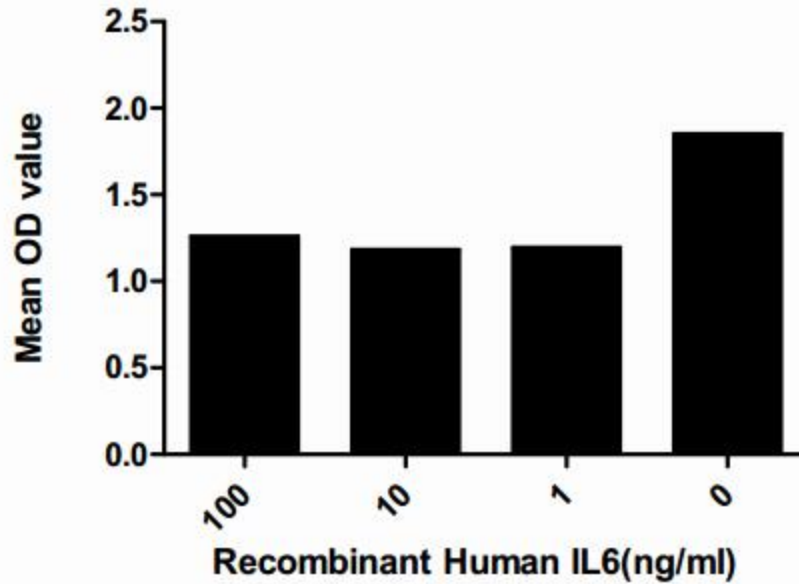


Figure 2. The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells detected by CCK8.

Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-inflammatory myokine. Current data suggest that direct application of IL-6 on breast cancer cells inhibits proliferation in ER-positive (estrogen-receptor-positive) cells through the Jak/Stat3 pathway. To test the inhibitory effect of IL-6 on proliferation of ER-positive MCF-7 cell line, cells were seeded into triplicate wells of 96-well plates at a density of 5,000 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 IL-6. After incubated for 96h, 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.

The inhibitory effect of IL-6 on cell proliferation of MCF-7 cells observed by inverted microscope and detected by CCK-8 was shown in Figure 1 and Figure 2 respectively (Dose-dependent effect was not detected in this case).

USAGE

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

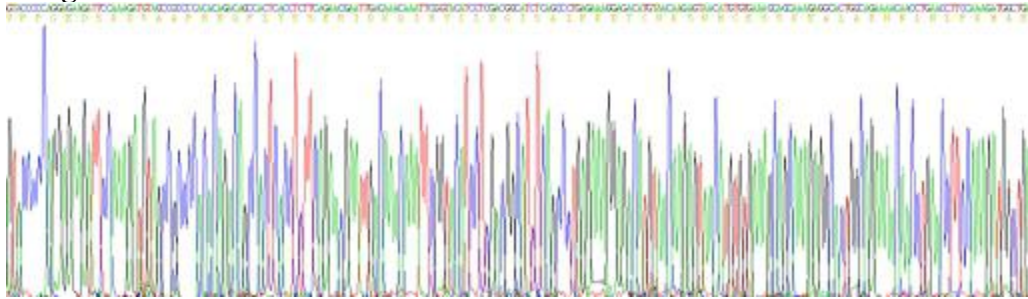
STORAGE

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

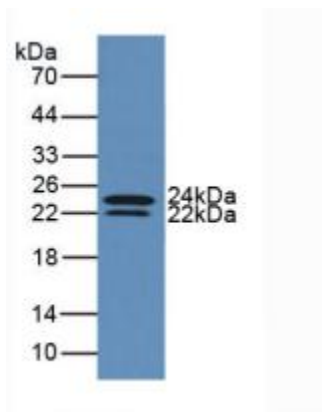


Figure. Western Blot; Sample: Recombinant IL6, Human.

[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.