

# Active Interleukin 5 (IL5)

## Instruction Manual

**SBPA050Hu61**

**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%

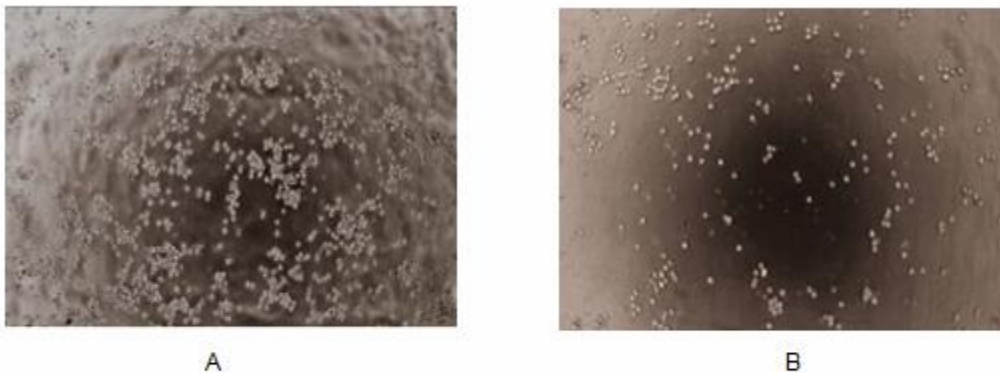
**Isoelectric Point**

7.0

**Applications**

Cell culture; Activity Assays; In vivo assays.

**ACTIVITY TEST**



**Figure 1. Cell proliferation of TF-1 cells after stimulated with IL-5.**

**(A) TF-1 cells cultured in RPMI-1640, stimulated with 10ng/mL IL-5 for 48h;**

**(B) Unstimulated TF-1 cells cultured in RPMI-1640 for 48h.**

Interleukin-5 (IL-5), a secreted glycoprotein, is a member of the hematopoietic family. Interleukin 5 has been shown to stimulate the proliferation of TF-1 cells. To test this effect, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of  $1 \times 10^4$  cells/well and incubated for 48h in the presence or absence of various concentrations of IL-5 at 37°C. The growth of cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10  $\mu$ 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°C.

Cell proliferation of TF-1 cells after incubation with IL-5 for 48h observed by inverted microscope was shown in Figure 1.

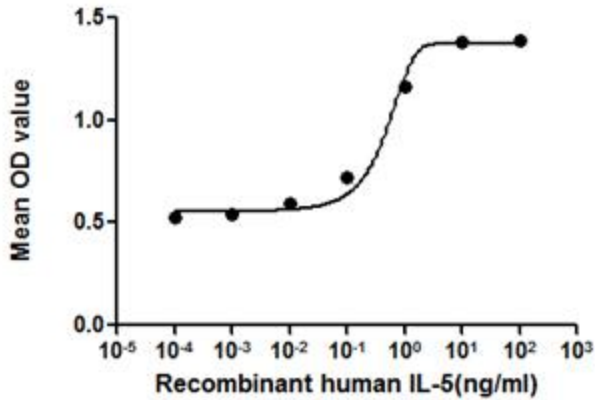


Figure 2. The dose-effect curve of IL-5 on TF-1 cells.

The dose-effect curve of IL-5 was shown in Figure 2. It was obvious that it significantly promoted cell proliferation of TF-1 cells. The ED50 for this effect is typically 0.18 to 7.675ng/mL.

## 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.

## **[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.