# Active Interleukin 1 Zeta (IL1z) Instruction Manual

## SBPE192Hu01

Homo sapiens (Human)

<b>Buffer Formulation</b>
Traits
Purity
<b>Isoelectric Point</b>
Applications

PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Freeze-dried powder
97%
8.7
Cell culture; Activity Assays.

ACTIVITY TEST

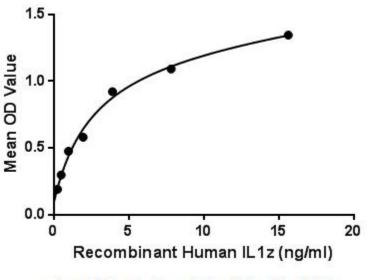


Figure 1. The binding activity of IL1z with IL18R1

Interleukin 37, also known as Interleukin 1 Zeta (IL1z), is an anti-inflammatory cytokine. Interleukines are cytokines that make an important part of immune signaling. It belongs to the interleukin-1 family. IL-37 plays a role in protecting the body against endotoxin shock, ischemia-reperfusion injury, autoimmune diseases, and cardiovascular diseases. In addition, IL-37 has a potential antitumor effect. Besides, Interleukin 18 Receptor 1 (IL18R1) has been identified as an interactor of IL1z, thus a binding ELISA assay was conducted to detect the interaction of recombinant human IL1z and recombinant human IL18R1. Briefly, IL1z were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to IL18R1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IL1z pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary

antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at  $37^{\circ}$ C. Finally, add  $50\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of IL1z and IL18R1 was shown in Figure 1, and this effect was in a dose dependent manner.

#### USAGE

Reconstitute in 10mM PBS (pH7.4) 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

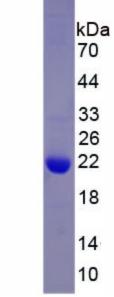


Figure. SDS-PAGE

### [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.