APE842Hu01 10μg
Active Interleukin 1 Zeta (IL1z)
Organism Species: *Homo sapiens (Human)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Lys27~Asp192
Tags: N-terminal His-tag
Purity: >90%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Original Concentration: 500μg/mL
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.7
Predicted Molecular Mass: 22.0kDa
Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

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

Stability Test: 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 37ºC 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.

[SEQUENCE]

KNLN PKKFSIHDQD HKVLVLDSGN LIAVPDKNYI RPEIFFALAS SLSSASAEKG SPILLGVSKG EFCLYCDKDK GQSHPSLQLK KEKLMKLAAQ KESARRPFIF YRAQVGSWNM LESAAHPGWF ICTSCNCNEP VGVTDKFENR KHIEFSFQPV CKAEMSPSEV SD

[ACTIVITY]

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℃. 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℃. Finally, add 50μl 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.

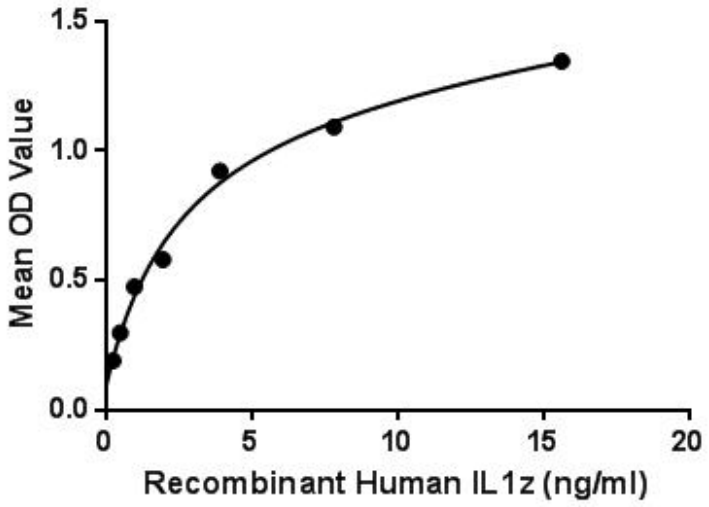

Figure 1. The binding activity of IL1z with IL18R1

[IDENTIFICATION]

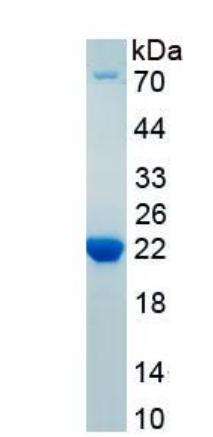

Figure 2. SDS-PAGE

Sample: Active recombinant IL1z, 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.