APA563Fi01 100μg
Active Interleukin 1 Beta (IL1b)
Organism Species: *Danio rerio (Zebrafish)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Met1~Ile273
Tags: N-terminal His-tag
Purity: >90%
Traits: Freeze-dried powder
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Original Concentration: 200μg/mL
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 5.4
Predicted Molecular Mass: 34.1kDa
Accurate Molecular Mass: 37kDa 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 2-8°C for one month.

Aliquot and store at -80°C 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 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.

[SEQUENCE]

MACGQYEVTIAPKNLWETDSAVYSDSDEMDCSDPLAMSYRCDMHEGIRLEMWTSQHKMKQLVNVIIALNRMKHIKPQSTEFGEKEVLDM
LMANVIQEREVNVVDSVPSYTKTKNVLQCTICDQYKKSLVRSGGSPHLQAVTLRAGSSDLKVRFSMSTYASPSAPATSAQPVCLGISKS
NLYLACSPAEGSAPHLVLKEISGSLETIKAGDPNGYDQLLFFRKETGSSINTFESVKCPGWFISTAYEDSQMVEMDRKDTERIINFELQ
DKVRI

[ACTIVITY]

Interleukin 1 beta (IL-1β) also known as leukocytic pyrogen, leukocytic endogenous mediator, mononuclear cell factor, lymphocyte activating factor and other names, is a member of the interleukin 1 family of cytokines. This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. It has been reported that IL-1β can induced IL-8 production in A549 cells. To test the bioactivity of recombinant zebrafish IL-1β, A549 cells were seeded into 24-well plate at a density of $1x10^5$ cells/mL , and allowed to attach overnight before treated with certain concentrations of recombinant zebrafish IL-1β for 48h and IL-8 levels in the cell supernatant were determined by ELISA (SEA080Hu). IL-8 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL-1β which was shown in Figure1, the EC50 was 16.86 ug/ml.

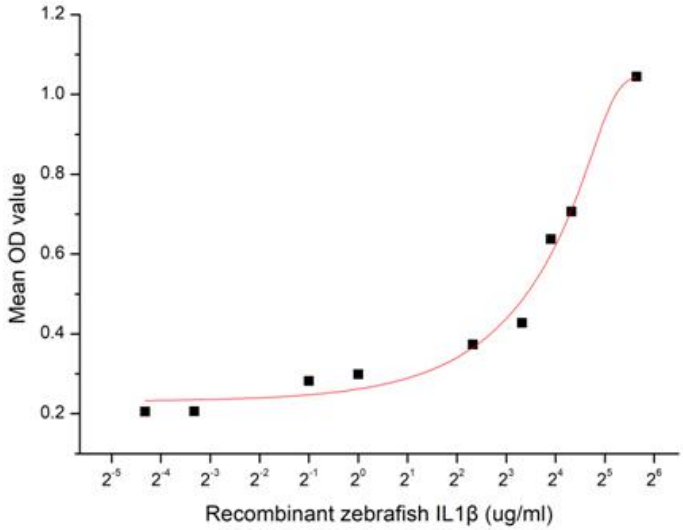

Figure1. IL-8 levels in the cell supernatant of A549 induced by recombinant zebrafish IL-1β

[IDENTIFICATION]

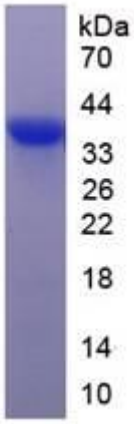

Figure 2. SDS-PAGE

Sample: Active recombinant IL1b, Zebrafish

[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.