

APA061Po01 100µg

Active Interleukin 15 (IL15)

Organism Species: *Sus scrofa*; *Porcine (Pig)*

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: Thr49~Ser162

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: 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: 4.6

Predicted Molecular Mass: 16.8kDa

Accurate Molecular Mass: 15kDa 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]

TW

QHVISDLKKI EDLIRSIHMD ATLYTESDAH PNCKVTAMKC FLEELRVILQ
ESRNSDISDT VENLIILANS SLSSIEYKTE SGCKECEEELE EKNINEFLKS
FIHIVQMFIN PS

[ACTIVITY]

Interleukin 15 (IL15) is a widely expressed cytokine that is structurally and functionally related to IL2, which plays an important role in many immunological diseases. IL15 also regulates T and natural killer (NK) cell activation and proliferation. The activity of recombinant pig IL15 was measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells. MO7e cells were seeded into triplicate wells of 96-well plates at a density of 30,000 cells/well in RPMI-1640 with the addition of various concentrations of rpIL15. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 ° C. Cell proliferation of MO7e cells after incubation with rpIL15 for 72h observed by inverted microscope was shown in Figure 1. The dose-effect curve of rpIL15 was shown in Figure 2. It was obvious that rpIL15 significantly promoted cell proliferation of MO7e cells .The EC50 for this effect is typically 0.55 ug/ml.

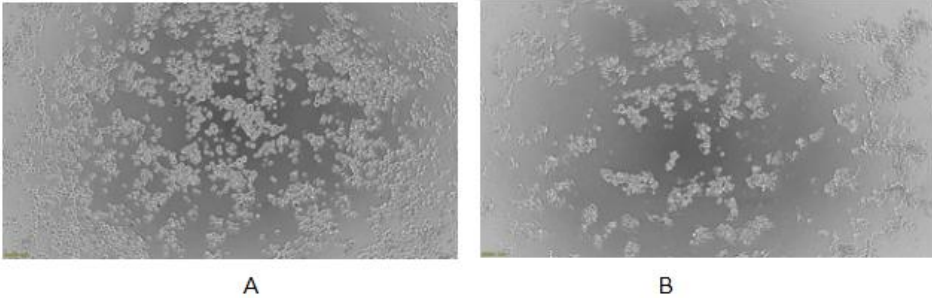


Figure 1. Cell proliferation of MO7e cells after stimulated with rpIL15

(A) MO7e cells cultured in RPMI-1640 , stimulated with 0.6 ug/ml rpIL15 for 72h;
 (B) Unstimulated MO7e cells cultured in RPMI-1640 for 72h.

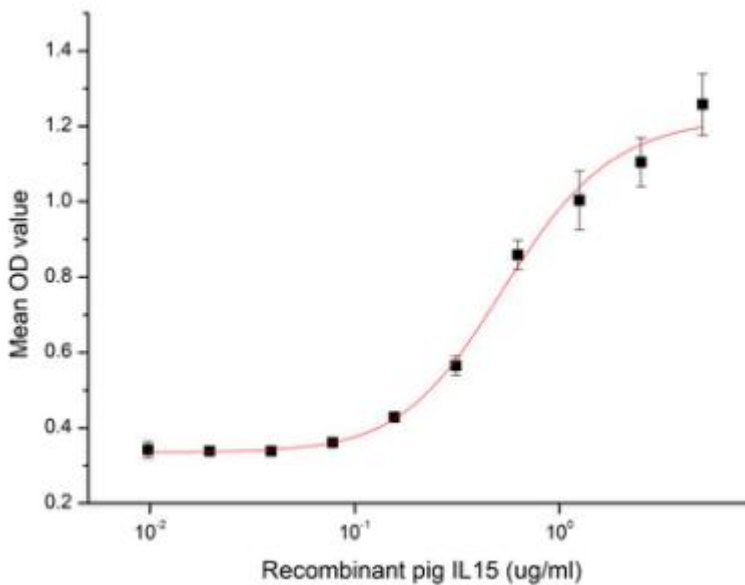


Figure 2. The dose-effect curve of rpIL15 on MO7e cells

[IDENTIFICATION]

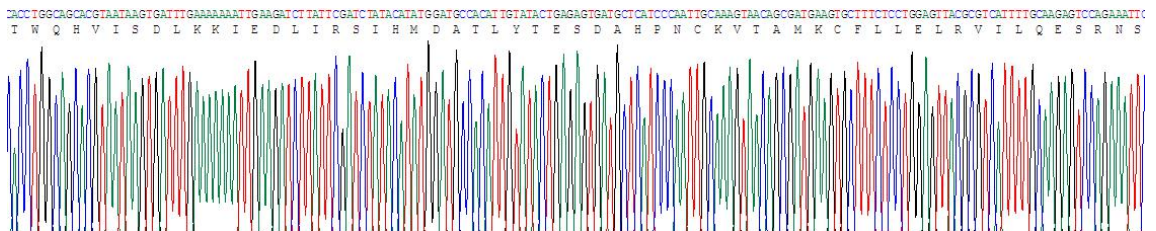


Figure 3. Gene Sequencing (extract)

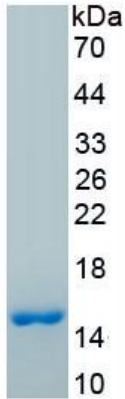


Figure 4. SDS-PAGE

Sample: Active recombinant IL15, Pig

[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.