

APA057Hu61 100μg

Active Interleukin 11 (IL11)

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: Eukaryotic expression.

Host: 293F cell

Residues: Pro22~Leu199

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 5% Trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 11.7

Predicted Molecular Mass: 20.8kDa

Accurate Molecular Mass: 20kDa 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]

PGPPPGPPR VSPDPRAELD STVLLTRSLL
ADTRQLAAQL RDKFPADGDH NLDSLPTLAM SAGALGALQL PGVLTRLRAD
LLSYLRHVQW LRRAGGSSLK TLEPELGTLQ ARLDRLLRRL QLLMSRLALP
OPPPDPPAPP LAPPSSAWGG IRAAHAILGG LHLTLDWAVR GLLLLKTRL

[ACTIVITY]

Interleukin 11 (IL-11) is a multifunctional cytokine. It is a key regulator of multiple events in hematopoiesis, most notably the stimulation of megakaryocyte maturation. IL-11 has been demonstrated to improve platelet recovery after chemotherapy-induced thrombocytopenia, induce acute phase proteins, modulate antigen-antibody responses and participate in the regulation of bone cell proliferation and differentiation. Besides, IL-11 has been proved to promote cell proliferation of TF-1 cells. 2x104 TF-1 cells were seeded into a well of 96-well plates and allowed to attach, replaced with various concentrations of recombinant human TRAIL. After incubated for 72 hours, the 96-well plate was read at OD450 nm. The result was shown in Figure 1. It was obvious that recombinant IL-11 protein significantly increased cell viability of TF-1 cells. Its EC50 is $0.5677 \,\mu$ g/mL.

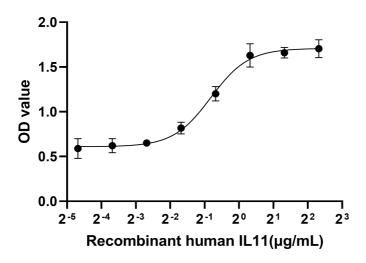


Figure 1.The dose-effect curve of recombinant human IL11 on TF-1 cells

[IDENTIFICATION]

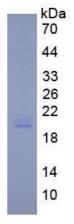


Figure 2. SDS-PAGE

Sample: Active recombinant IL11, 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.