APA057Hu61 100μg

Active Interleukin 11 (IL11)

Organism Species: ***Homo sapiens (Human)***

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Pro22~Leu199

Tags: N-terminal His-tag

Purity: >98%

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

Buffer Formulation: 10mM PBS, pH7.6, 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 (pH7.6) 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 -80°C for 12 months.

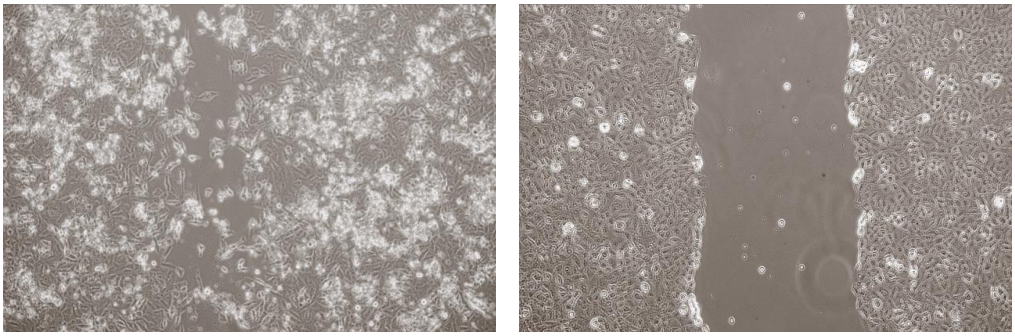
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

PGPPPGPPR VSPDPRAELD STVLLTRSLL
ADTRQLAAQL RDKFPADGDH NLDSLPTLAM SAGALGALQL PGVLTRLRAD
LLSYLRHVQW LRRAGGSSLK TLEPELGTLQ ARLDRLLRRL QLLMSRLALP
QPPPDPPAPP 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, participate in the regulation of bone cell proliferation and differentiation IL-11 causes bone-resorption. Besides, IL-11 have been proved can promote migration of A549 cells, 5×10^4 cells were seeded into 6 well plates. After cell confluent, replace with DMEM without serum overnight. Using a (yellow) pipette tip make a straight scratch, simulating a wound, then washing the wells three times with PBS. Adding 1% serum standard DMEM containing various concentrations of recombinan human IL-11 to each well, incubating the plate for 48 hours at 37℃, 5% CO_2. The results observed by inverted microscope was shown in Figure1.



A B

Figure 1. Wound healing assay of A549 cells after stimulated with IL-11.

(A) A549 cells cultured in DMEM with 100ng/mL IL-11 for 48h;

(B) A549 cells cultured in DMEM before addition IL-11.

[IDENTIFICATION]

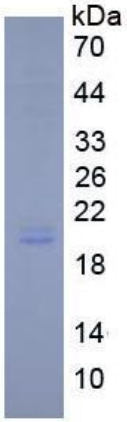


Figure 2. SDS-PAGE

Sample: Active recombinant IL11, Human

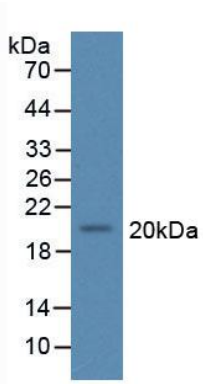


Figure 3. Western Blot

Sample: Recombinant IL11, Human;

Antibody: Rabbit Anti-Human IL11 Ab (PAA057Hu06)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.