

APC007Mu01 100µg

Active Interleukin 34 (IL34)

Organism Species: *Mus musculus (Mouse)*

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Asn21~Pro235

Tags: N-terminal His-tag

Purity: >95%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 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: 7.7

Predicted Molecular Mass: 25.8kDa

Accurate Molecular Mass: 27kDa 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.

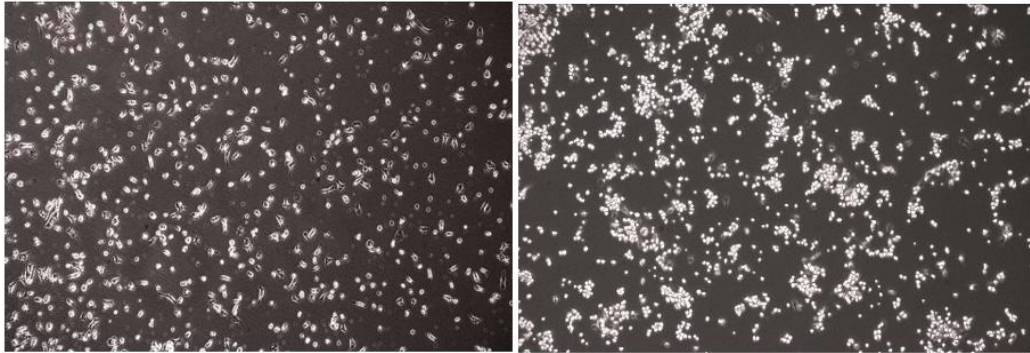
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date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

[SEQUENCE]

NENLEIWTLT QDKECDLTGY LRGKLQYKNR LQYMKHYFPI NYRIAVPYEG VLRVANITRL QKAHVSEREL RYLWVLVSLN
ATESVMDVLL EGHPSWKYLQ EVQTLLENVQ RSLMDVEIGP HVEAVLSLLS TPGLSLKLVK PKALLDNCFR VMELLYCSCC
KQSPILKWQD CELPRLPHPS PGSLMQCTAT NVYPLSRQTP TSLPGSPSSS HGSLP

[ACTIVITY]

Interleukin 34 (IL-34) is a protein belonging to a group of cytokines called interleukins. IL-34 increases growth or survival of immune cells known as monocytes; it elicits its activity by binding the Colony stimulating factor 1 receptor. To explore the effect of IL-34 induction of bone marrow cells differentiation into macrophages, 1×10^6 density of bone marrow cells were cultured with different concentration of recombinant mouse IL-34 for 7days, every three day changed with fresh culture. Setting the blank well without IL-34 as the control well. After 7days later, bone marrow cells culture with 1ug/ml IL-34 were significantly differentiation into macrophages. The result observed by inverted microscope was shown on Figure1. Ink phagocytosis test shows ,after stimulated by IL-34, most of cells have phagocytosis function. The results were shown on Figure2.



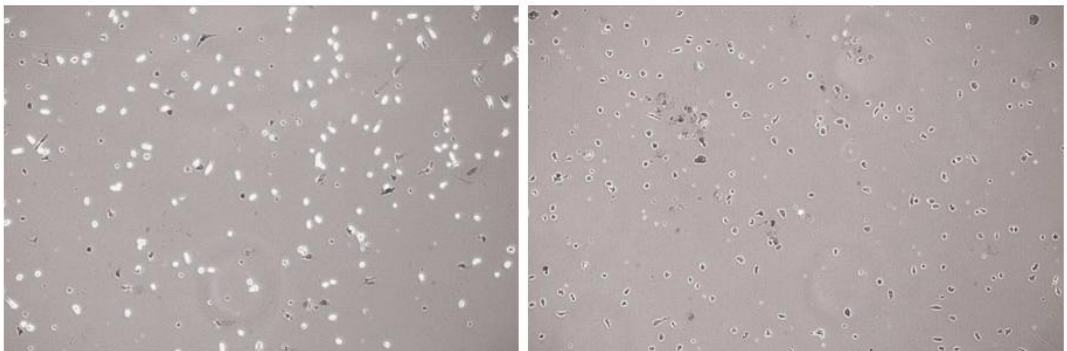
A

B

Figure1. Bone marrow cells differentiation into macrophages stimulated by IL-34.

A. Bone marrow cells culture without IL-34 for 7 days;

B. Bone marrow cells differentiation into macrophages after culture with 1ug/ml IL-34 for 7 days.



C

D

Figure2. Ink phagocytosis test.

C. Bone marrow cells unstimulated by IL-34, most of cells haven't phagocytosis function;

D. Bone marrow cells stimulated by IL-34, most of cells have phagocytosis function.

[IDENTIFICATION]

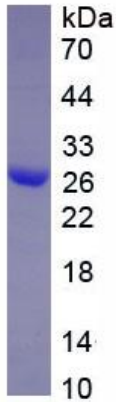


Figure 3. SDS-PAGE

Sample: Active recombinant IL34, Mouse

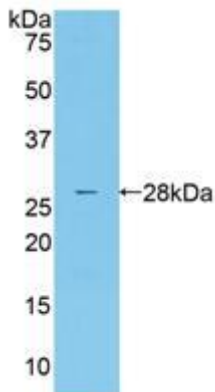


Figure 4. Western Blot

Sample: Recombinant IL34, Mouse;

Antibody: Rabbit Anti- Mouse IL34 Ab (PAC007Mu01)

[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.