

**APC007Hu63 100µg**

**Active Interleukin 34 (IL34)**

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

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Eukaryotic expression.

**Host:** 293F cell

**Residues:** Asn21~Pro242

**Tags:** C-terminal His-tag

**Purity:** >90%

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

**Buffer Formulation:** PBS, pH7.4, containing 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:** 6.0

**Predicted Molecular Mass:** 26.6kDa

**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 ]**

NEPLEMWPLTQNEECTVTGFLRDKLQYRSRLQYMKHYFPINYKISVPYEGVFRIANVTRL  
QRAQVSERELRYLWVLVSLSATSVQDVLLLEGHPWSWKYLQEVETLLLNVQQGLTDVEVS  
PKVESVLSLLNAPGPNLKLVRPKALLDNCFRVMELLYCSCCKQSSVLNWQDCEVPSPQSC  
SPEPSLQYAATQLYPPPPWSPSPPHSTGSRPVRAQGEGLLP

## **[ 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 test the effect of IL-34 on cell proliferation, TE-1 cells were seeded into triplicate wells of 96-well plates which contains various concentrations of recombinant human IL-34. After incubated for 3 days, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10  $\mu$ l 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 2-4 hours at 37 °C . Cell viability was assessed by CCK-8(Cell Counting Kit-8 ) assay. The result was shown in Figure 1. It was obvious that IL-34 significantly increased cell viability of TE-1 cells. The ED50 is 2.252  $\mu$ g/ml.

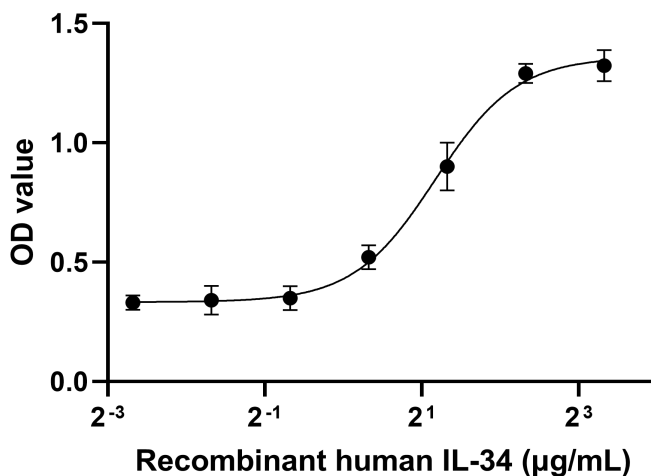


Figure1. The dose-effect curve of recombinant human IL-34 on TE-1 cells

## [ IDENTIFICATION ]

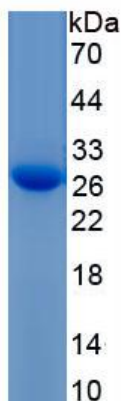


Figure 2. SDS-PAGE

Sample: Active recombinant IL34, 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.