APC058Hu01 100μg
Active Interleukin 20 (IL20)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Leu25~Glu176
Tags: N-terminal His-tag
Purity: >92%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays; In vivo assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.9
Predicted Molecular Mass: 21.2kDa
Accurate Molecular Mass: 21kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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^{o}C for one month.
Aliquot and store at -80^{o}C for 12 months.

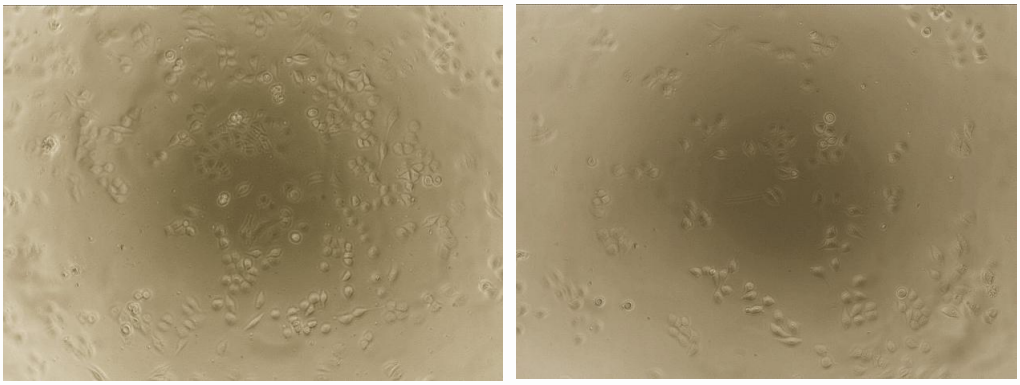
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date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

[SEQUENCE]

LKTLNL GSCVIATNLQ EIRNGFSEIR
GSVQAKDGNI DIRILRRTES LQDTKPANRC CLLRHLLRLY LDRVFKNYQT
PDHYTLRKIS SLANSFLTIK KDLRLCHAHM TCHCGEEAMK KYSQILSHFE
KLEPQAAVVK ALGELDILLQ WMEETE

[ACTIVITY]

IL20 (Interleukin-20) is a cytokine structurally related to interleukin 10, which is produced by activated keratinocytes and monocytes. It is accepted that IL20 regulates proliferation and differentiation of keratinocytes during inflammation, particularly inflammation associated with the skin. Thus, proliferation assay of IL20 was conducted using ECV-304 cells. Briefly, ECV-304 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard 1640 prior to the addition of various concentrations of IL20. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of ECV-304 cells after incubation with IIL20 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with human recombinant IL20 for 48h. The result was shown in Figure 2. It was obvious that human IL20 significantly decreased cell viability of ECV-304 cells.



A B

Figure 1. Cell proliferation of ECV-304 cells after stimulated with IL20.

(A) ECV-304 cells cultured in 1640, stimulated with 500ng/mL IL20 for 48h;

(B) Unstimulated ECV-304 cells cultured in 1640 for 48h.

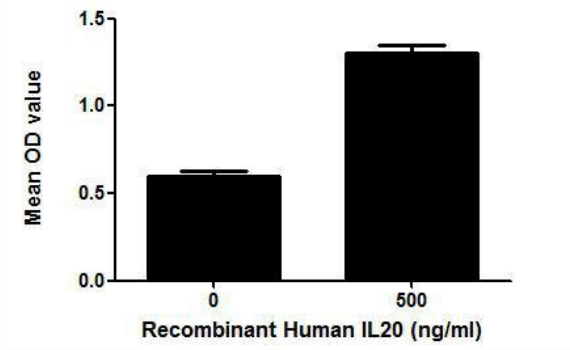


Figure 2. Cell proliferation of ECV-304 cells after stimulated with IL20.

[IDENTIFICATION]

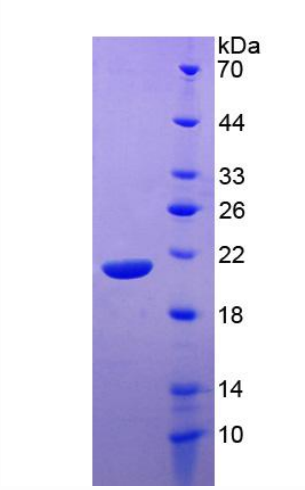


Figure 3. SDS-PAGE

Sample: Active recombinant IL20, Human

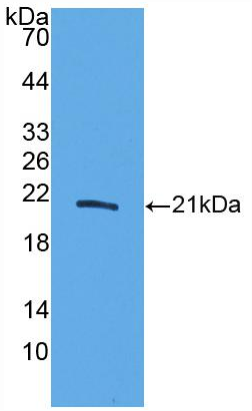


Figure 4. Western Blot

Sample: Recombinant IL20, Human;

Antibody: Rabbit Anti-Human IL20 Ab (PAC058Hu01)