APA110Hu61 100μg
Active Oncostatin M (OSM)
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: Ala26~Arg220
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 .
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: 9.4
Predicted Molecular Mass: 23.5kDa
Accurate Molecular Mass: 24kDa 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 2-8ºC for one month.
Aliquot and store at -80ºC 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

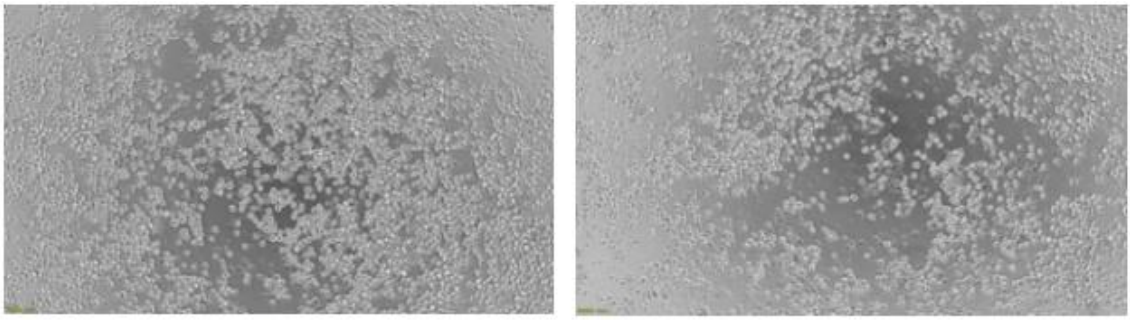
protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

AAIGS CSKEYRVLLG QLQKQTDLMQ
DTSRLLDPYI RIQGLDVPKL REHCRERPGA FPSEETLRGL GRRGFLQTLN
ATLGCVLHRL ADLEQRLPKA QDLERSGLNI EDLEKLQMAR PNILGLRNNI
YCMAQLLDNS DTAEPTKAGR GASQPPTPTP ASDAFQRKLE GCRFLHGYHR
FMHSVGRVFS KWGESPNRSR

[ACTIVITY]

Oncostatin M (OSM) is an approximately 30 KDa secreted cytokine belonging to the Interleukin-6 family. Like other members of the IL-6 family such as IL-11, CNTF, and Cardiotrophin-1, OSM plays crucial roles in inflammation, neuroprotection, hematopoiesis, metabolism and development. To test the effect of OSM on cell proliferation, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 20,000 cells/well with various concentrations of recombinant human OSM. After incubated for 72 hours, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8(CCK-8). Briefly, 10 μl 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 1-4 hours at 37℃. Proliferation of TF-1 cells after incubation with OSM for 72 hours observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant human OSM for 72 hours. The result was shown in Figure 2. It was obvious that recombinant human OSM significantly increased cell viability of TF-1 cells, the EC50 was 0.08 ng/ml.



A B

Figure 1. Cell proliferation of TF-1 cells after stimulated with recombinant human OSM.
(A) TF-1 cells cultured in 1640, stimulated with 0.1 ng/ml OSM for 72 hours;
(B) Unstimulated TF-1 cells cultured in 1640 for 72 hours.

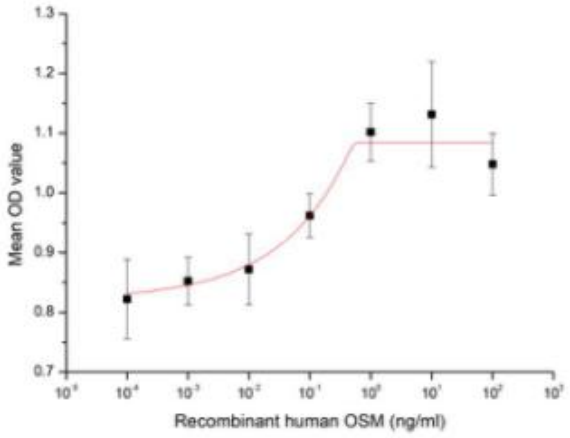


Figure 2. Cell proliferation of TF-1 cells after stimulated with recombinant human OSM.

[IDENTIFICATION]

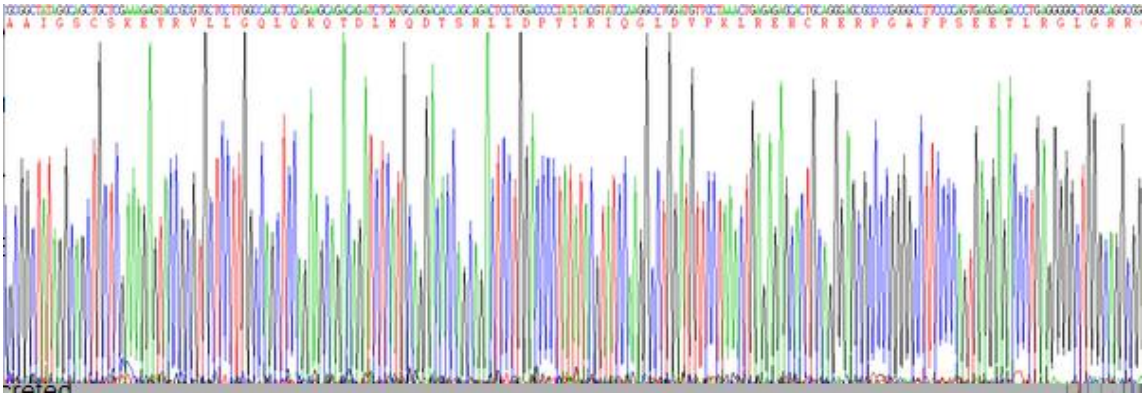


Figure 3. Gene Sequencing (extract)

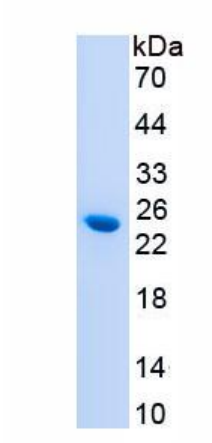


Figure 4. SDS-PAGE

Sample: Active recombinant OSM, 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.