

APA110Hu01 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: Prokaryotic expression.

Host: *E. coli*

Residues: Ala26~Arg220

Tags: N-terminal His and GST Tag

Purity: >90%

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

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 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: 8.2

Predicted Molecular Mass: 51.9kDa

Accurate Molecular Mass: 52kDa 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]

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AAIGS CSKEYRVLLG QLQKQTDLMQ
DTSRLLDPYI RIQGLDVPKL REHCRERPGA FPSEETLRGL GRRGFLQTLN
ATLGCVLHRL ADLEQRLPKA QDLERSGLNI EDLEKLQMAR PNILGLRNNI
YCMAQLLDNS DTAEPTKAGR GASQPPTPTP ASDAFQRKLE GCRFLHGYYR
FMHSVGRVFS KWGESPNRSR
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[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 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 μ 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 1-4 hours at 37 °C . 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 0.014 μ g/ml.

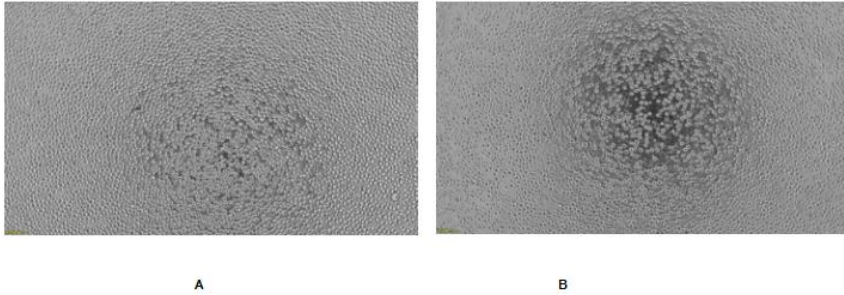


Figure 1. Cell proliferation of TF-1 cells after stimulated with recombinant human OSM.
(A) TF-1 cells cultured in 1640, stimulated with 0.04 ug/ml OSM for 72 hours;
(B) Unstimulated TF-1 cells cultured in 1640 for 72 hours.

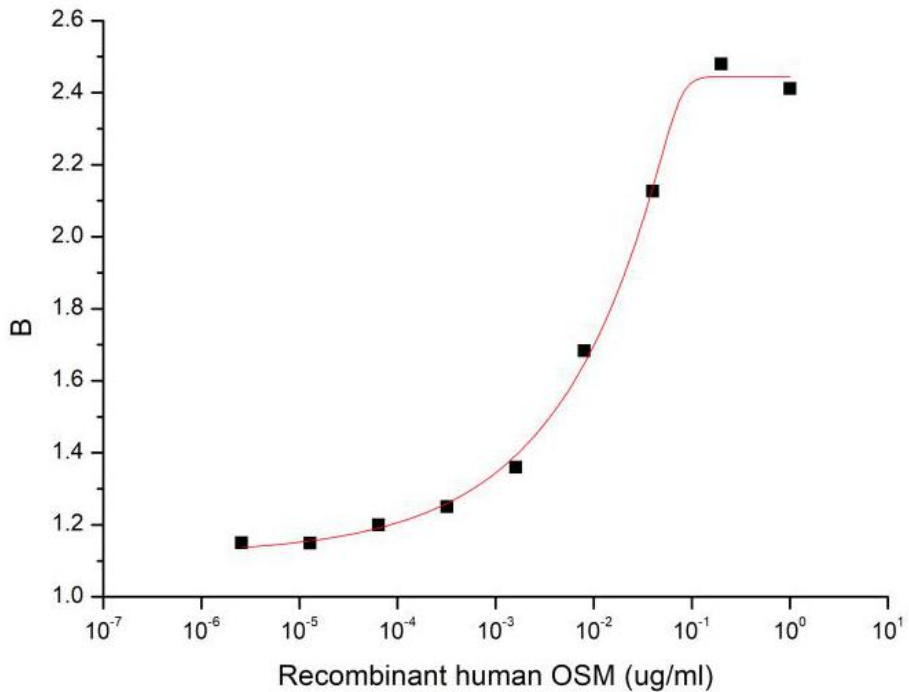


Figure 2. Cell proliferation of TF-1 cells after stimulated with recombinant human OSM.

[IDENTIFICATION]

