

Active Activin A (ACVA) Instruction Manual

SBPA002Hu01

Homo sapiens (Human)

Buffer Formulation

20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 90%

Isoelectric Point

9.3

Applications

Cell culture; Activity Assays.

ACTIVITY TEST



Figure 1. Inhibition of A549 cells proliferation after stimulated with ACVA
(A) A549 cells cultured in DMEM, stimulated with 10µg/mL ACVA for 48h;
(B) Unstimulated A549 cells cultured in DMEM for 48h.

Activin A (ACVA) is a member of the TGF- β superfamily of cytokines and involved in a wide range of biological processes including tissue morphogenesis and repair, fibrosis, inflammation, neural development, hematopoiesis, reproductive system function, and carcinogenesis. To test the effect of ACVA on cell apoptosis, A549 cells were seeded into 96-well plates at a density of 3,000 cells/well with 1% serum standard DMEM including various concentrations of recombinant human ACVA. After incubated for 48h, 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 2 hours at 37°C. Proliferation of A549 cells after incubation with ACVA 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 recombinant human ACVA for 48h. The result was shown in Figure 2. It was obvious that ACVA significantly inhibit cell viability of A549 cells. The ED50 is 5.09 $\mu\text{g}/\text{mL}$.

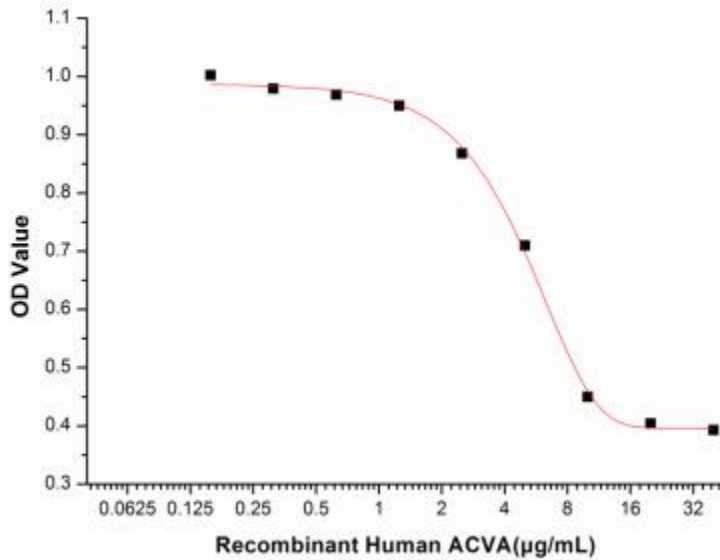


Figure 2. Inhibition of A549 cells proliferation after stimulated with ACVA.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

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.

Image

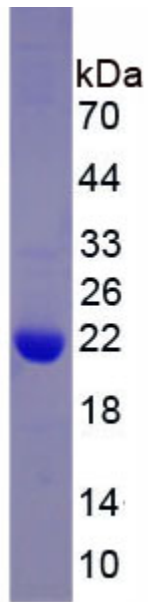


Figure. SDS-PAGE

[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.