Active Endostatin (ES) Instruction Manual

SBPA142Hu61

Homo sapiens (Human)

Buffer Formulation PBS, pH7.4, containing 5% Trehalose.

Traits Freeze-dried powder

Purity > 90%

Isoelectric Point 9.1

Applications Cell culture; Activity Assays.

ACTIVITY TEST

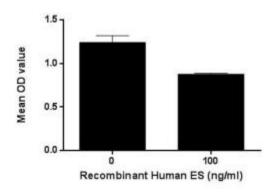


Figure 1. ES inhibit proliferation of EV304 cells

Endostatin (ES) is a naturally occurring, 20kDa C-terminal fragment derived from type XVIII collagen. It is reported to serve as an anti-angiogenic agent, similar to angiostatin and thrombospondin. Endostatin is a broad-spectrum angiogenesis inhibitor and may interfere with the pro-angiogenic action of growth factors such as basic fibroblast growth factor (bFGF/FGF-2) and vascular endothelial growth factor (VEGF). To test the effect of ES on inhibit the VEGF basic-dependent proliferation of ECV304 endothelium cell line, cells were seeded into triplicate wells of 96-well plates at a density of 5, 000 cells/well when the cell attached, replaced with serum-free standard DMEM overnight. Then the medium was replaced with 2% serum standard DMEM which contain 10ng/mL of VEGFA and various concentrations of ES. After incubated for 72h, 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 measure the absorbance at 450nm using a microplate reader after incubating the

plate for 1-4 hours at 37°C. The result was shown in Figure 1. It was obvious that ES (100ng/mL) significantly inhibit cell proliferation of EV304 cells.

USAGE

Reconstitute in ddH₂O to a concentration of 0.1-0.5 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

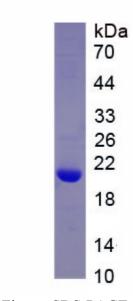


Figure. SDS-PAGE

[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.