Active Stem Cell Factor (SCF) Instruction Manual

SBPA076Po61

Sus scrofa; Porcine (Pig)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Traits	Freeze-dried powder
Purity	> 95%
Isoelectric Point	5.3
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

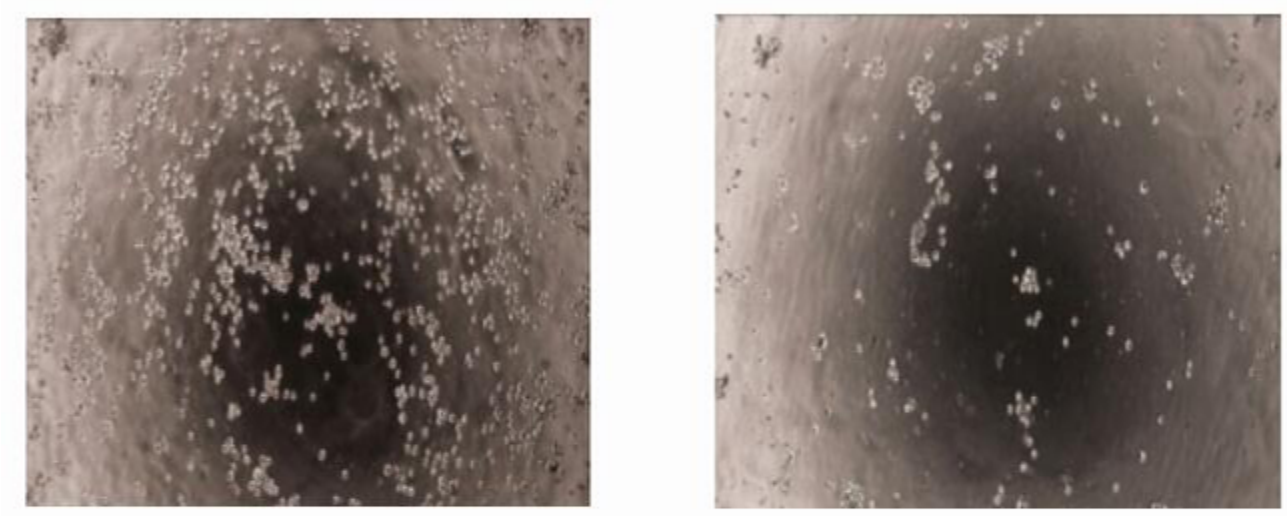


Figure 1. Cell proliferation of TF-1 cells after stimulated with SCF.

(A) TF-1 cells cultured in RPMI-1640, stimulated with 10ng/mL SCF for 72h;

(B) Unstimulated TF-1 cells cultured in RPMI-1640 for 72h.

Stem cell factor (SCF), also known as mast cell growth factor (MGF), and steel factor (SLF), plays an important role in hematopoiesis, spermatogenesis, and melanogenesis. SCF has been shown to stimulate the proliferation of TF-1 cells. To test this effect, TF-1

cells were seeded into triplicate wells of 96-well plates at a density of 1x104cells/well and incubated for 72h in the presence or absence of various concentrations of SCF at 37oC. The growth of 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 measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37oC.
Cell proliferation of TF-1 cells after incubation with SCF for 72h observed by inverted microscope was shown in Figure 1.

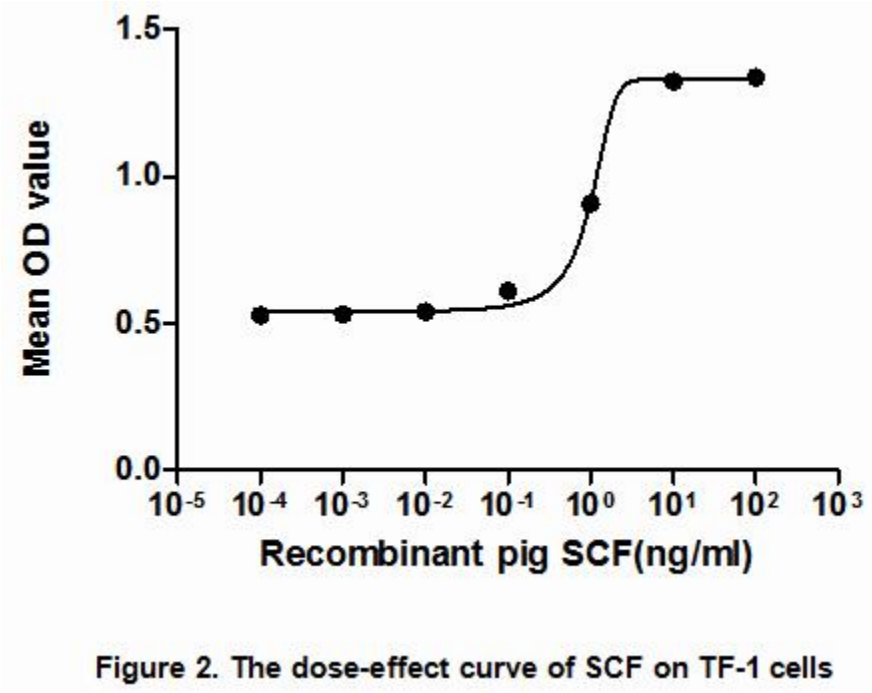


Figure 2. The dose-effect curve of SCF on TF-1 cells

The dose-effect curve of SCF was shown in Figure 2. It was obvious that it significantly promoted cell proliferation of TF-1 cells. The ED50 for this effect is typically 6.07 to 13.69ng/mL.

USAGE

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

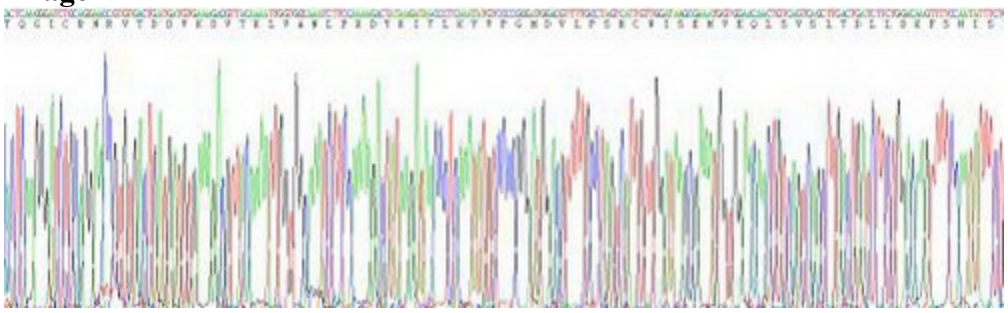
STORAGE

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



SDS-PAGE Image

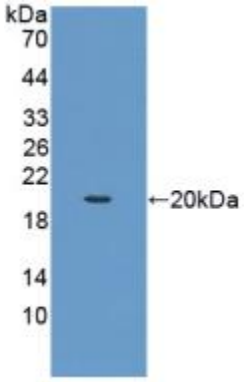


Figure. Western Blot; Sample: Recombinant SCF, Porcine.

[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.