Active Fibroblast Growth Factor 23 (FGF23) Instruction Manual

SBPA168Mu01

Mus musculus (Mouse)

Buffer Formulation20mM 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 9.8

Applications Cell culture; Activity Assays.

ACTIVITY TEST



Figure 1. Cell proliferation of 3T3 cells after stimulated with FGF23.

- (A) 3T3 cells cultured in DMEM, stimulated with 1000ng/mL FGF23 for 48h;
- (B) Unstimulated 3T3 cells cultured in DMEM for 48h.

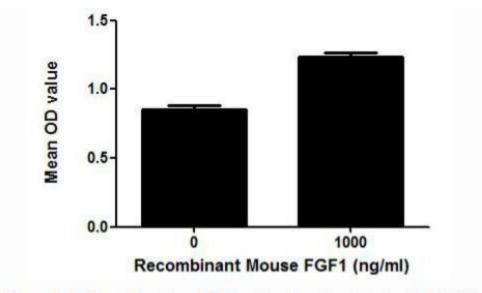


Figure 2. Cell proliferation of 3T3 cells after stimulated with FGF23.

FGF23 (Fibroblast growth factor 23) is a member of the fibroblast growth factor family, which possess broad mitogenic and cell survival activities and are involved in a variety of biological processes. A proliferation assay was conducted to detect the bioactivity of recombinant mouse FGF23 using 3T3 cells. Briefly, 3T3 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of FGF23. After incubated for 48h, 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 the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of 3T3 cells after incubation with FGF23 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 FGF23 for 48h. The result was shown in Figure 2. It was obvious that FGF23 significantly increased cell viability of 3T3 cells.

USAGE

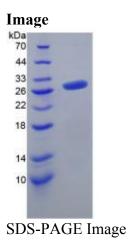
Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

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.



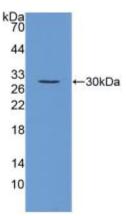


Figure. Western Blot; Sample: Recombinant FGF23, Mouse.

[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.