

Active Fibroblast Growth Factor 18 (FGF18) Instruction Manual

SBPC314Hu01

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

10.7

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

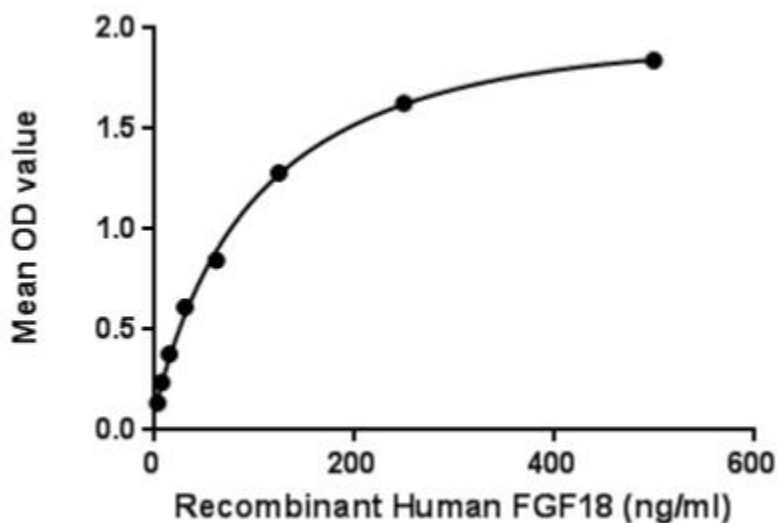


Figure 1. The binding activity of FGF18 with FGFR3

Fibroblast Growth Factor-18 (FGF18) is a trophic factor for mature chondrocytes and their progenitors. It has been reported to have significant anabolic effects on cartilage. FGF18 plays a central role in skeletal growth and development. Besides, Fibroblast Growth Factor Receptor 3 (FGFR3) has been identified as an interactor of FGF18, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF18 and recombinant human FGFR3. Briefly, FGF18 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to FGFR3-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated

for 1h with anti-FGF18 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of FGF18 and FGFR3 was shown in Figure 1, and this effect was in a dose dependent manner.

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

AGCTTGTGACGGAGCTGGATTGGGATGDEGACDATTGTGTGTCCAGTCATGCTAGCATTATGGCTGCTGCGGGCCAGGGGCGTGTGTGTGATGATGATGATGGGTGCTGCCATGGTATATCTCTCTTTAAGTAAACAAATTATTTCTAGGGGANTTTTATGTCCTACATTTGCTT

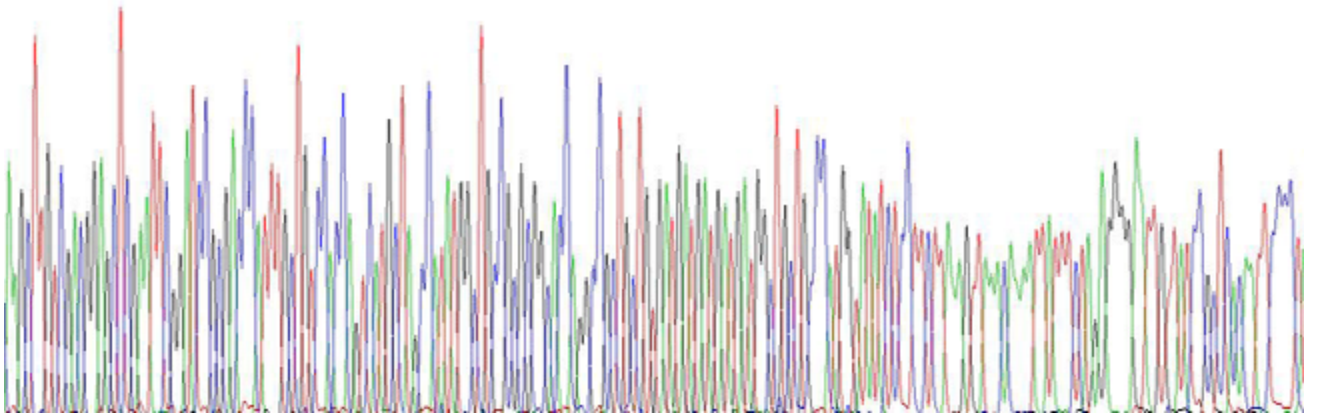


Figure. SDS-PAGE

[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.