

# Active Fibroblast Growth Factor 19 (FGF19) Instruction Manual

## SBPC324Hu01

**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**

> 97%

**Isoelectric Point**

6.4

**Applications**

Cell culture; Activity Assays.

### ACTIVITY TEST

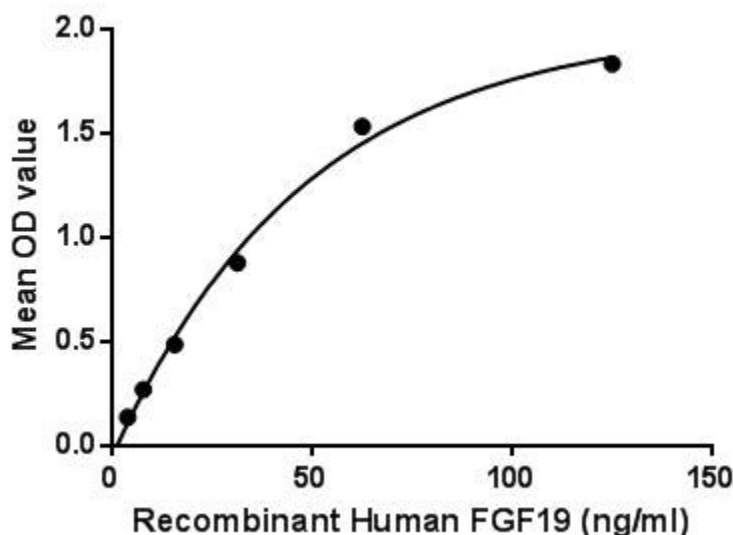


Figure. The binding activity of FGF19 with FGFR1.

Fibroblast Growth Factor 19 (FGF19) is a member of the fibroblast growth factor (FGF) family. FGF19 has important roles as a hormone produced in the ileum in response to bile acid absorption, regulates new bile acid synthesis, acting through the FGFR4/Klotho- $\beta$  receptor complexes in the liver to inhibit CYP7A1. FGF19 also has metabolic effects, affecting glucose and lipid metabolism. Besides, Fibroblast Growth Factor Receptor 1 (FGFR1) has been identified as an interactor of FGF19, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF19 and recombinant human FGFR1. Briefly, FGF19 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 $\mu$ L were then transferred to FGFR1-coated microtiter wells and

incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FGF19 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 FGF19 and FGFR1 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

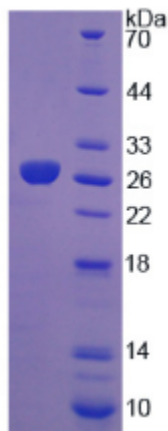


Figure. SDS-PAGE

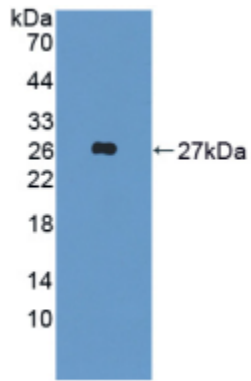


Figure. Western Blot

**[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.