Active Fibroblast Growth Factor 2, Basic (FGF2) Instruction Manual

SBPA144Hu01

Homo sapiens (Human)

Buffer Formulation PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Traits Freeze-dried powder

Purity > 95% Isoelectric Point 9.6

Applications Cell culture; Activity Assays.

ACTIVITY TEST

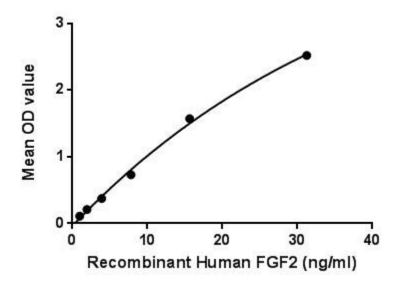


Figure. The binding activity of FGF2 with CASP1.

Basic fibroblast growth factor (FGF2), also known as bFGF, FGF-β is a member of a large family of structurally related heparin-binding proteins (the FGFs) involved in the regulation of cell proliferation, growth and differentiation. It involved in many biological processes including angiogenesis, embryonic development and wound healing. Additionally, FGF2 is a critical component of human embryonic stem cell culture medium. Besides, Caspase 1 (CASP1) has been identified as an interactor of FGF2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human FGF2 and recombinant human CASP1. Briefly, FGF2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to CASP1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-FGF2 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 50μ L stop solution to the wells and read at 450nm immediately. The binding activity of FGF2 and CASP1 was shown in Figure 1, and this effect was in a dose dependent manner.

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

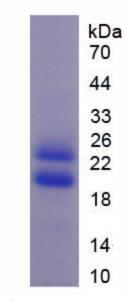


Figure. SDS-PAGE

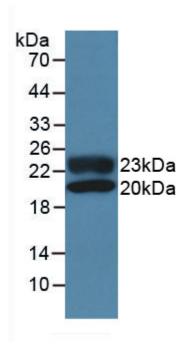


Figure. Western Blot

[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.