Active Transforming Growth Factor Beta 3 (TGFb3) Instruction Manual

SBPB283Hu01

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	> 95%
Isoelectric Point	8.2
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

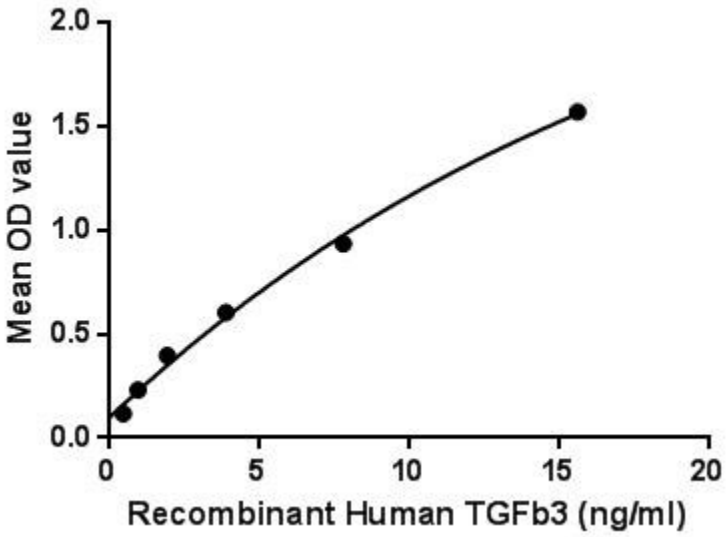

Figure. The binding activity of TGFb3 with TGFbR2.

Transforming growth factor beta-3 (TGFb3) is a type of protein, known as a cytokine, which is involved in cell differentiation, embryogenesis and development. It belongs to a large family of cytokines called the Transforming growth factor beta superfamily. TGFb3 is believed to regulate molecules involved in cellular adhesion and extracellular matrix (ECM) formation during the process of palate development. It also plays an essential role in controlling the development of lungs in mammals, by also regulating cell adhesion and ECM formation in this tissue, and controls wound healing by regulating the movements of epidermal and dermal cells in injured skin. Besides, Transforming Growth Factor Beta Receptor II (TGFbR2) has been identified as an interactor of TGFb3, thus a binding

ELISA assay was conducted to detect the interaction of recombinant human TGFb3 and recombinant human TGFbR2. Briefly, TGFb3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TGFbR2-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-TGFb3 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℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of TGFb3 and TGFbR2 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

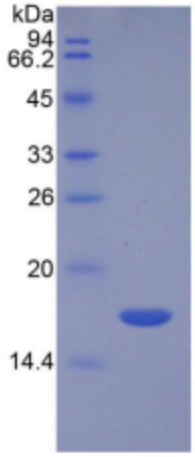

Figure. SDS-PAGE

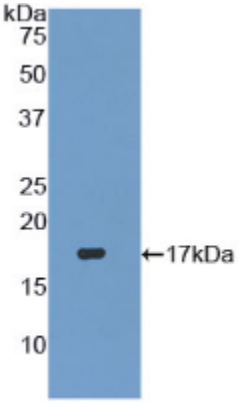

Figure. Western Blot

[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.