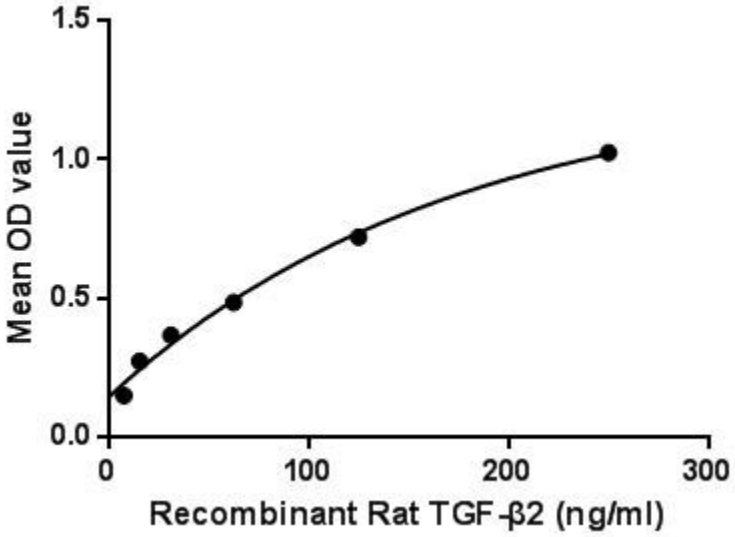
Active Transforming Growth Factor Beta 2 (TGFb2) Instruction Manual

SBPA101Ra01

Rattus norvegicus (Rat)

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	6.7
Applications	Cell culture; Activity Assays.

ACTIVITY TEST



Transforming growth factor-beta 2 (TGF-β2) is a secreted protein known as a cytokine that performs many cellular functions and has a vital role during embryonic development (alternative names: Glioblastoma-derived T-cell suppressor factor, G-TSF, BSC-1 cell growth inhibitor, Polyergin, Cetermin). It is an extracellular glycosylated protein. It is known to suppress the effects of interleukin dependent T-cell tumors. Besides, Vitronectin (VTN) has been identified as an interactor of TGF-β2, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat TGF-β2 and recombinant rat VTN. Briefly, TGF-β2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µL were then transferred to VTN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h

with anti-TGF-β2 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 TGF-β2 and VTN was shown in Figure 1, and this effect was in a dose dependent manner.
Figure. The binding activity of TGF-β2 with VTN.

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

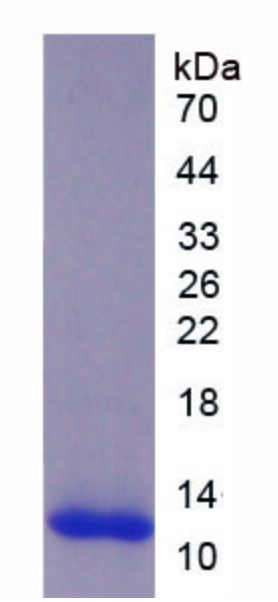


Figure. Western Blot

[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.