

Active Transforming Growth Factor Beta 1 (TGFβ1) Instruction Manual

SBPA079Po01

Sus scrofa; Porcine (Pig)

Buffer Formulation

PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.

Traits

Freeze-dried powder

Purity

> 97%

Isoelectric Point

8.4

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

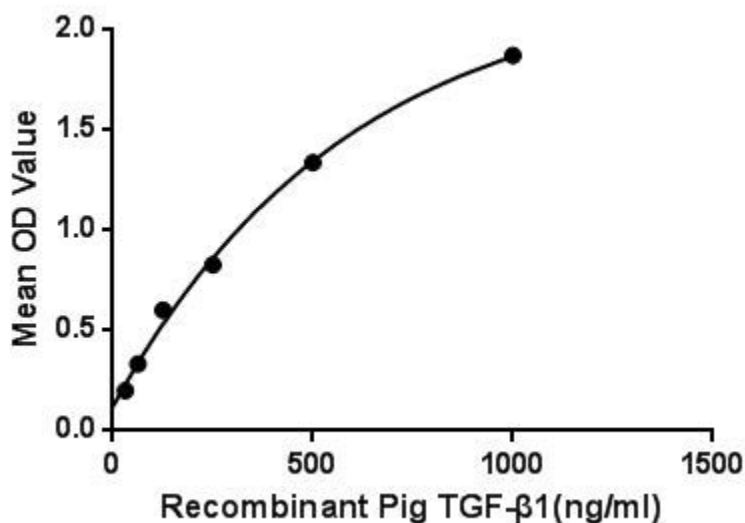


Figure. The binding activity of TGF-β1 with LTBP1.

Transforming growth factor beta 1 or TGF-β1 is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. TGF-β1 plays an important role in controlling the immune system, and shows different activities on different types of cell, or cells at different developmental stages. Besides, Latent Transforming Growth Factor Beta Binding Protein 1 (LTBP1) has been identified as an interactor of TGF-β1, thus a binding ELISA assay was conducted to detect the interaction of recombinant pig TGF-β1 and recombinant pig LTBP1. Briefly, TGF-β1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to LTBP1-coated microtiter

wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TGF-β1 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 TGF-β1 and LTBP1 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

ATG GGTATC A TG TACTACAGGAGGATG TGGTGTACTTATGATTCGGAGC TGG TGGATGATGAGTACAGGATACGCAATTCGCTGATGCTGATTCGATCGATGAGAGATGCTGCTGAGATGCAATCGGCTGAGGAGGAGTGGTGGTCAATGAGGATGCT
ALDTWYCFSSTEKNCCVRQLVIDFRKDLGVKVIHEPKGTHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGASAAAPCCVPQALEPLI

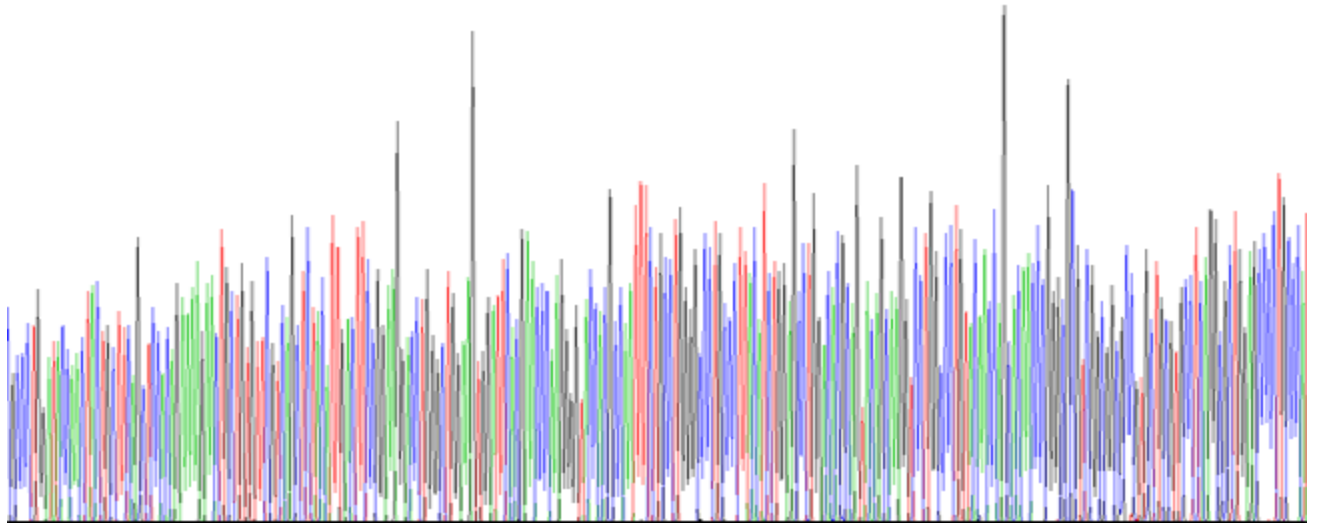


Figure. Western Blot

[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.