

**APA124Hu01 10µg**  
**Active Transforming Growth Factor Beta 1 (TGFb1)**  
**Organism Species: Homo sapiens (Human)**  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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1st Edition (Apr, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Ala279~Ser390

**Tags:** N-terminal His-tag

**Purity:** >98%

**Buffer Formulation:** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 0.01% sarcosyl, 5%Trehalose.

**Applications:** Cell culture; Activity Assays; In vivo assays.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 8.4

**Predicted Molecular Mass:** 14.1kDa

**Accurate Molecular Mass:** 15kDa as determined by SDS-PAGE reducing conditions.

## **[ USAGE ]**

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** 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.

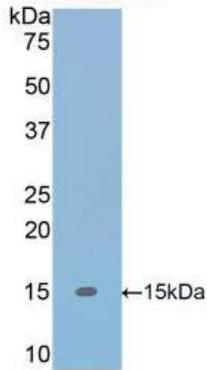
## **[ SEQUENCE ]**

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AL DTNYCFSSTE KNCCVRQLYI  
DFRKDLGWKW IHEPKGYHAN FCLGPCPYIW SLDTQYSKVL ALYNQHNPQA  
SAAPCCVPQA LEPLPIVYV GRKPKVEQLS NMIVRSCKCS
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## **[ ACTIVITY ]**

TGF- $\beta$ 1 (Transforming growth factor beta 1) is a multifunctional set of peptides that controls proliferation, differentiation, and other functions in many cell types. TGF beta 1 has been shown to interact with TGF beta receptor 1, Decorin, LTBP1 and so on. Thus we have conducted a binding ELISA assay to detect the interaction of recombinant human TGF- $\beta$ 1 with recombinant human LTBP1. Briefly, TGF- $\beta$ 1 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL 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-LTBP1 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 50 $\mu$ L stop solution to the wells and read at 450nm immediately. The binding activity of TGF- $\beta$ 1 with LTBP1 was shown in Figure 1 and this effect was in a dose dependent manner.





**Figure 4. Western Blot**

**Sample: Recombinant TGFb1, Human;**

**Antibody: Rabbit Anti-Human TGFb1 Ab (PAA124Hu01)**

**[ 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.