

APA124Hu01 100µg
Active Transforming Growth Factor Beta 1 (TGFb1)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th 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 0.05% sarcosyl and 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]

AL DTNYCFSSTE KNCCVRQLYI
DFRKDLGWKW IHEPKGYHAN FCLGPCPYIW SLDTQYSKVL ALYNQHNPQA
SAAPCCVPQA LEPLPIVYV GRKPKVEQLS NMIVRSCKCS

[ACTIVITY]

TGF- β 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- β 1 with recombinant human LTBP1. Briefly, TGF- β 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 μ L stop solution to the wells and read at 450nm immediately. The binding activity of TGF- β 1 with LTBP1 was shown in Figure 1 and this effect was in a dose dependent manner.

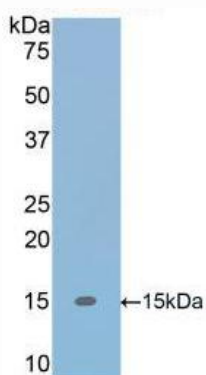


Figure 4. Western Blot

Sample: Recombinant TGFb1, Human;

Antibody: Rabbit Anti-Human TGFb1 Ab (PAA124Hu01)