



APA218Hu01 10µg
Active Transforming Growth Factor Beta 2 (TGFb2)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ser303~Glu414

Tags: N-terminal His-tag

Purity: >92%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 5% Trehalose.

Original Concentration: 1500µg/mL

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 8.9

Predicted Molecular Mass: 16.6kDa

Accurate Molecular Mass: 17kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) 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]

SGKTPHLL LMLPSYRLE SQQTNRKKR ALDAAYCFRN VQDNCCLRPL
YIDFKRDLGW KWIHEPKGYN ANFCAGACPY LWSSDTQHSR VLSLYNTINP
EASASPCCVS QDLE

[ACTIVITY]

Transforming Growth Factor Beta 2 (TGFB2) belongs to TGF-beta family. As a secreted protein and a cytokine, TGFB2 plays a role in the formation of blood vessels, the regulation of muscle tissue and body fat development, wound healing, and immune system function. Besides, TGFB2 regulates cell proliferation, differentiation, adhesion, migration by transducing the signal through transmembrane receptors type I and type II (TGFB1 and TGFB2). To test the effect of TGFB2 on inhibit IL4-dependent proliferation, CTLL-2 cells were seeded into triplicate wells of 96-well plates, the medium was 2% serum RPMI-1640 including various concentrations of recombinant human TGFB2. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured. Cell viability was assessed by CCK-8 assay. The result was shown in Figure1. It was obvious that TGFB2 significantly decreased cell viability of CTLL-2 cells. The ED50 of recombinant human TGFB2 is 1.95µg/mL.

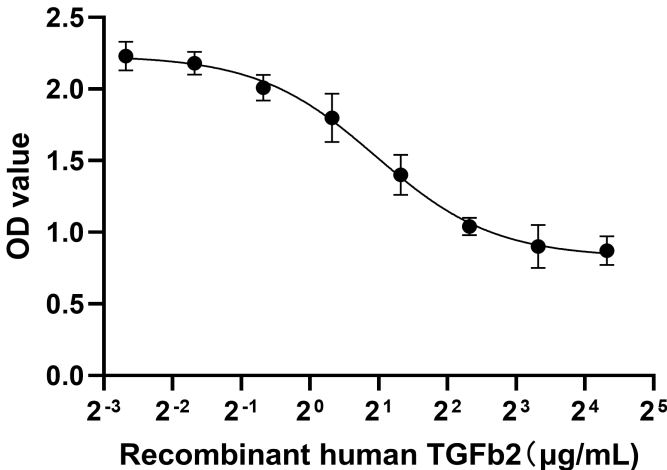


Figure 1. The dose-effect curve of recombinant human TGFb2 on on inhibit IL4-dependent proliferation

[IDENTIFICATION]

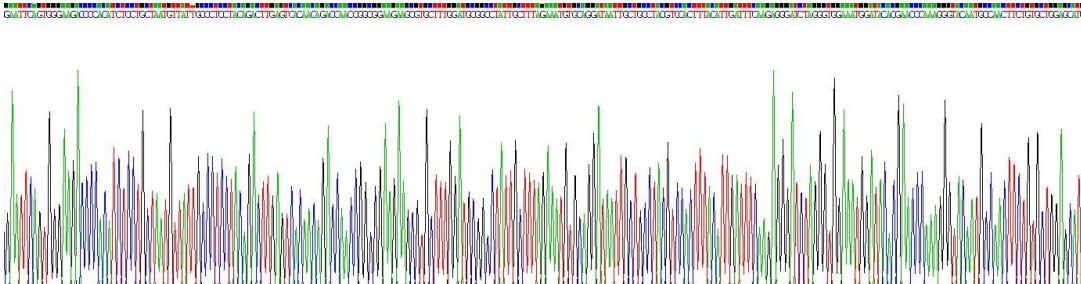


Figure 2. Gene Sequencing (extract)

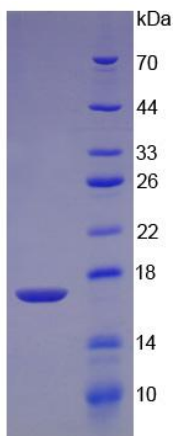


Figure 3. SDS-PAGE

Sample: Active recombinant TGFb2, Human

[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.