

Transforming Growth Factor Beta 1 Active Protein | TGFb1 active protein

Active Transforming Growth Factor Beta 1 (TGFb1)

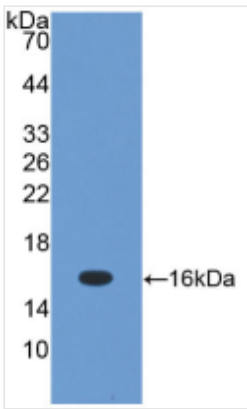
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA21163	E. coli	Mus musculus (Mouse)	Cell Culture, Activity Assay

PRODUCT SYNONYMS

Transforming Growth Factor Beta 1; Active Transforming Growth Factor Beta 1 (TGFb1); TGF-B1; CED; DPD1; LAP; Camurati-Engelmann Disease; Latency-associated peptide; TGFb1 active protein

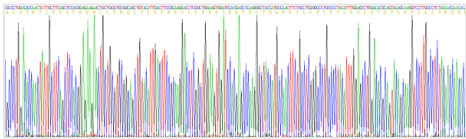
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Mus musculus (Mouse)
Purity/Purification	>98%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 150ug/mL (varies by lot)
Applicable Applications for TGFb1 active protein	Cell Culture, Activity Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Prokaryotic expression.
Residues	Ala279~Ser390
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	8.4
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree 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 degree 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.



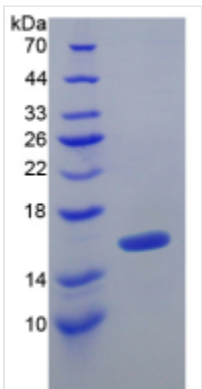
WB (Western Blot)

Western BlotSample: Recombinant TGFβ1, Mouse;Antibody: Rabbit Anti-Mouse TGFβ1 Ab



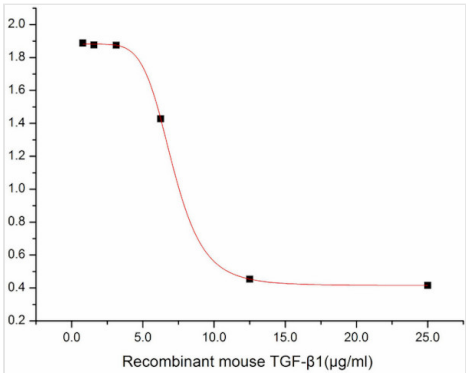
Gene Sequencing

Figure. Gene Sequencing (Extract



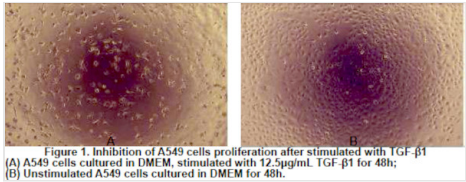
SDS-PAGE

Sample: Active recombinant TGFβ1, Mouse



Application Data

Inhibition of A549 cells proliferation after stimulated with TGF-β1.



Activity

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. To test the effect of TGF-β1 on cell apoptosis, A549 cells were seeded into 96-well plates at a density of 5,000 cells/well with 1% serum standard DMEM including various concentrations of recombinant mouse TGF-β1. After incubated for 48h, 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 450nm was measured using a microplate reader after incubating the plate for 2 hours at 37°C. Proliferation of A549 cells after incubation with TGF-β1 for 48h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 assay after incubation with recombinant mouse TGF-β1 for 48h. The result was shown in Figure 2. It was obvious that TGF-β1 significantly inhibit cell viability of A549 cells. The ED50 is 7.1 μg/mL.

AL DTNYCSSTE KNCCVRQLYI
DFRKDLGKWK IHEPKGYHAN FCLGPCPYIW SLDIQYSKVL ALYNQHNPGA
SASPCVPQA LEPLPIVYV GRKPKVEQLS NMIVRSCKCS

Sequence Information

ADDITIONAL INFORMATION

Product Categories/Family for TGFβ1 active protein	Cytokine; Tumor immunity; Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	135675
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NCBI GeneID	21803
UniProt Accession #	P04202
Molecular Weight	Predicted Molecular Mass: 14.1kDa Accurate Molecular Mass: 16kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	Transforming growth factor beta-1 proprotein
NCBI Official Synonym Full Names	transforming growth factor, beta 1
NCBI Official Symbol	Tgfb1
NCBI Official Synonym Symbols	Tgfb; Tgfb-1; TGFbeta1; TGF-beta1
NCBI Protein Information	transforming growth factor beta-1 proprotein
UniProt Protein Name	Transforming growth factor beta-1
UniProt Gene Name	Tgfb1
UniProt Synonym Gene Names	TGF-beta-1; LAP
UniProt Entry Name	TGFB1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-tgfb1-mouse-mus-musculus-active-protein/transforming-growth-factor-beta-1/21163>