

Transforming Growth Factor Beta 1 Active Protein | TGFb1 active protein

Active Transforming Growth Factor Beta 1 (TGFb1)

CATALOG #
AAA150075

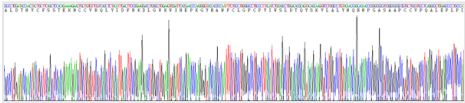
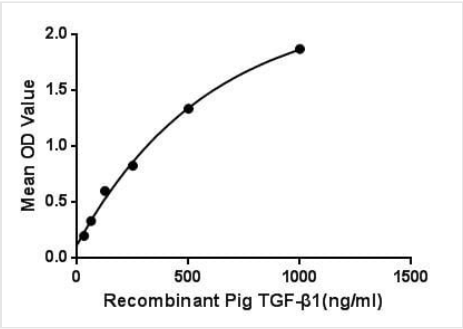
APPLICATIONS
Activity Assay, Cell Culture

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

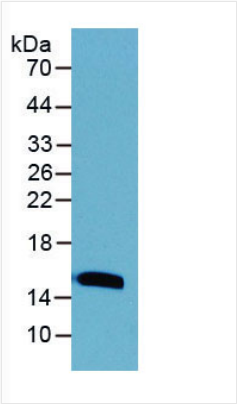
Purity/Purification	>95%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Ala279~Ser390
Sequence Length	390
Applicable Applications for TGFb1 active protein	Activity Assay, Cell Culture
Species	Pig
Tag	N-terminal His Tag
Isoelectric Point	8.4
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. 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 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.



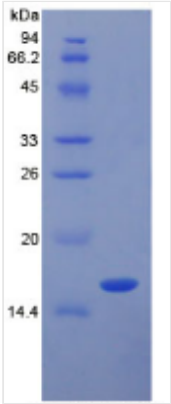
Gene Sequencing
Figure. Gene Sequencing (Extract)

Bioactivity

Figure. The binding activity of TGF-1 with LTBP1. Transforming growth factor beta 1 or TGF-1 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-1 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-1, thus a binding ELISA assay was conducted to detect the interaction of recombinant pig TGF-1 and recombinant pig LTBP1. Briefly, TGF-1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100L were then transferred to LTBP1-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-TGF-1 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. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of TGF-1 and LTBP1 was shown in Figure 1, and this effect was in a dose dependent manner.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for TGFb1 active protein	Cytokine; Tumor immunity; Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	1148291169
NCBI GeneID	397078
NCBI Accession #	NP_999180.2
NCBI GenBank Nucleotide #	NP_999180.2
UniProt Accession #	P07200

Molecular Weight	Predicted Molecular Mass: 14.3kDa Accurate Molecular Mass: 16kDa
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	TGF-BETA-1
NCBI Protein Information	transforming growth factor beta-1 proprotein; transforming growth factor beta-1
UniProt Protein Name	Transforming growth factor beta-1
UniProt Gene Name	TGFB1
UniProt Synonym Gene Names	TGF-beta-1; LAP

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/tgfb1-active-protein/transforming-growth-factor-beta-1/150075>