Active Transforming Growth Factor Beta 2 (TGFb2)

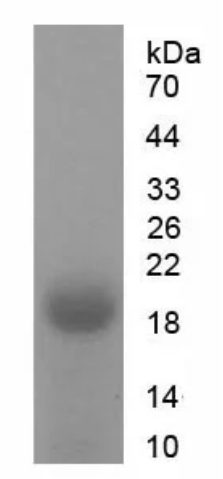
Catalog#:PXV12279

概述（Summary）

别称（Alternative Names）	TGF-B2; TGF-Beta2; G-TSF; LAP; Cetermin; Polyergin; Latency-associated peptide; BSC-1 cell growth inhibitor; Glioblastoma-derived T-cell suppressor factor
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu279-Ser412】
Accession #	P30371
表达宿主（Host）	-
种属（Species）	Chicken (Gallus)
预测分子量（Predicted MW）	19.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Transforming growth factor beta-2 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-2 (TGF-beta-2) chains, which constitute the regulatory and active subunit of TGF-beta-2, respectively.; Required to maintain the Transforming growth factor beta-2 (TGF-beta-2) chain in a latent state during storage in extracellular matrix. Associates non-covalently with TGF-beta-2 and regulates its activation via interaction with 'milieu molecules', such as LTBP1 and LRRC32/GARP, that control activation of TGF-beta-2.; Transforming growth factor beta-2: Multifunctional protein that

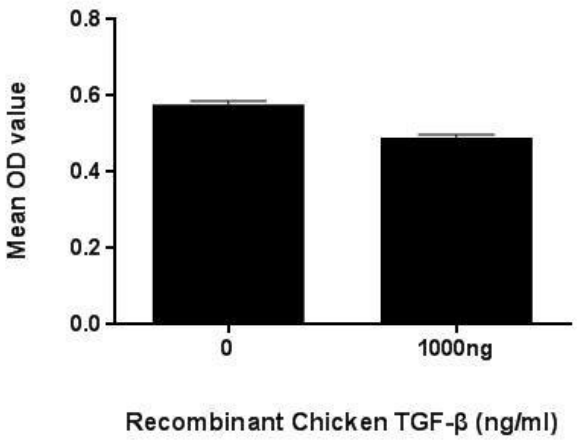
regulates various processes such as angiogenesis and heart development. Activation into mature form follows different steps: following cleavage of the proprotein in the Golgi apparatus, Latency-associated peptide (LAP) and Transforming growth factor beta-2 (TGF-beta-2) chains remain non-covalently linked rendering TGF-beta-2 inactive during storage in extracellular matrix. At the same time, LAP chain interacts with 'milieu molecules', such as LTBP1 and LRRC32/GARP, that control activation of TGF-beta-2 and maintain it in a latent state during storage in extracellular milieus. Once activated following release of LAP, TGF-beta-2 acts by binding to TGF-beta receptors (TGFBR1 and TGFBR2), which transduce signal.

电泳图（SDS-PAGE image）



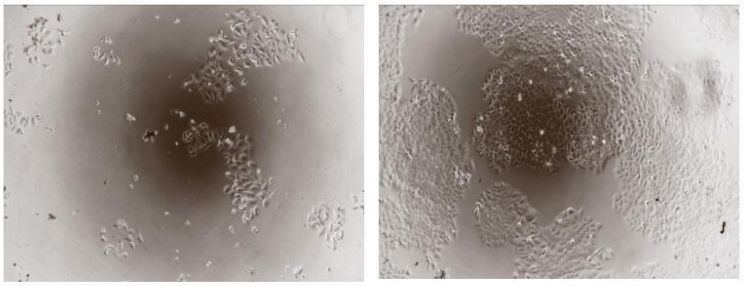
Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Transforming growth factor beta (TGF-β) is a multifunctional cytokine belonging to the transforming growth factor superfamily.

The TGF-β superfamily includes endogenous growth inhibiting proteins; an increase in expression of TGF-β often correlates with the malignancy of many cancers and a defect in the cellular growth inhibition response to TGF-β. Its immunosuppressive functions then come to dominate, contributing to oncogenesis. To test the effect of TGF-β on inhibit HGF-dependent proliferation, HepG2 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM including 1ng/mL HGF prior to the addition of various concentrations of recombinant chicken TGF-β. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μL 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 1-4 hours at 37℃. The inhibitory effect of TGF-β on HGF-dependent proliferation of HepG2 cells observed by inverted microscope was shown in Figure1. Cell viability was assessed by CCK-8 assay after incubation with recombinant TGF-β for 96h. The result was shown in Figure 2. It was obvious that TGF-β significantly decreased cell viability of HepG2 cells. (A) HepG2 cells cultured in DMEM, stimulated with 1μg/mL TGF-β for 96h; (B) Unstimulated HepG2 cells cultured in DMEM for 96h. Figure. The inhibitory effect of TGF-β on cell proliferation of HepG2 cells. Figure. TGF-β inhibit cell proliferation of HepG2 cells.



A B

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.