Active Transforming Growth Factor Beta 2 (TGFb2)

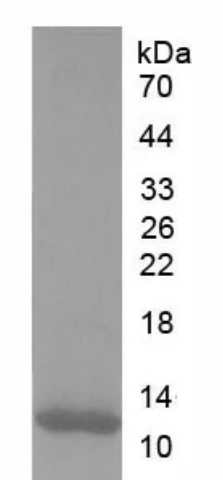
Catalog#:PXR12281

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 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala331-Ser442】
Accession #	Q07257
表达宿主（Host）	-
种属（Species）	Rattus norvegicus (Rat)
预测分子量（Predicted MW）	13.9 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 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 20mM Tris, 150mM NaCl (pH8.0) 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

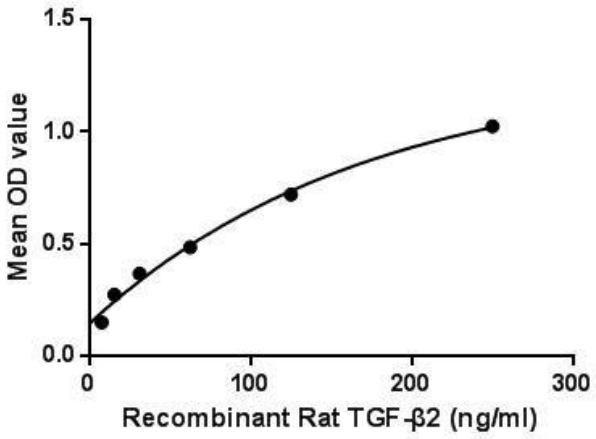
regulates various processes such as angiogenesis and heart development. Activation into mature form follows different steps: following cleavage of the proprotein in the Golgi apparatus, Latency-associated peptide (LAP) and Transforming growth factor beta-2 (TGF-beta-2) chains remain non-covalently linked 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 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Transforming growth factor-beta 2 (TGF-β2) is a secreted protein known as a cytokine that performs many cellular functions and

has a vital role during embryonic development (alternative names: Glioblastoma-derived T-cell suppressor factor, G-TSF, BSC-1 cell growth inhibitor, Polyergin, Cetermin). It is an extracellular glycosylated protein. It is known to suppress the effects of interleukin dependent T-cell tumors. Besides, Vitronectin (VTN) has been identified as an interactor of TGF-β2, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat TGF-β2 and recombinant rat VTN. Briefly, TGF-β2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to VTN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-TGF-β2 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 50μL stop solution to the wells and read at 450nm immediately. The binding activity of TGF-β2 and VTN was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of TGF-β2 with VTN.

注意事项（Note）

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