Active Transforming Growth Factor Beta 2 (TGFb2)

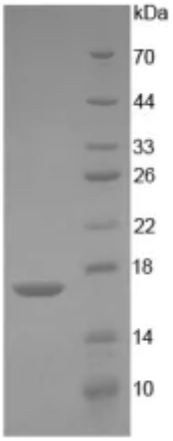
Catalog#:PEH12280

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）	【Ser303-Glu414】
Accession #	P61812
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	16.6 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 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）

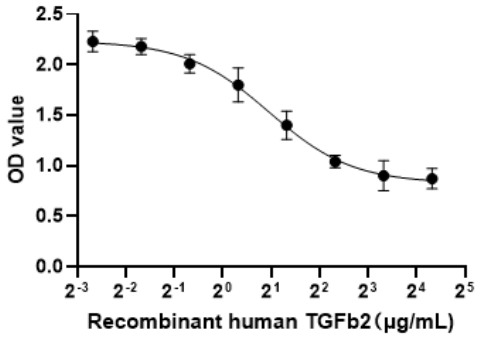


Figure1. The dose-effect curve of recombinant human TGFb2 on on inhibit IL4-dependent proliferation

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 (TGFBR1 and TGFBR2). 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.

注意事项（Note）

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