abcam

Product datasheet

Recombinant human TGF beta 1 protein (Active) ab271757

2 Images

Description

Product name	Recombinant human TGF beta 1 protein (Active)
Biological activity	The ED_{50} measured by TGFβ1's ability to inhibit mIL-4-dependent proliferation of HT-2 mouse helper T cells is <0.05ng/ml.
Purity	>= 90 % SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	Freestyle 293-F cells
Accession	P01137
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	AL DTNYCFSSTE KNCCVRQLYI DFRKDLGWKW IHEPKGYHAN FCLGPCPYIW SLDTQYSKVL ALYNQHNPGA SAAPCCVPQA LEPLPIVYYV GRKPKVEQLS NMIVRSCKCS
Predicted molecular weight	44 kDa
Amino acids	279 to 390
Additional sequence information	Mature chain.

Specifications

Our Abpromise guarantee covers the use of **ab271757** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Lyophilized

Preparation and Storage

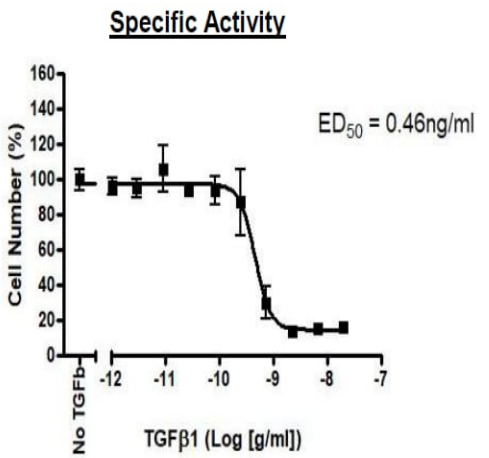
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 2.50 Constituents: 0.75% Glycine, 0.58% Sodium chloride Buffer lyophilized from. 0.2 µm filtered. This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Reconstitute in sterile 0.2 M acetic acid with 0.1% BSA. Further dilutions may be made in PBS with 0.1% BSA. To maximize product collection from vial surface, vortex briefly and then spin down to recollect the liquid.

General Info

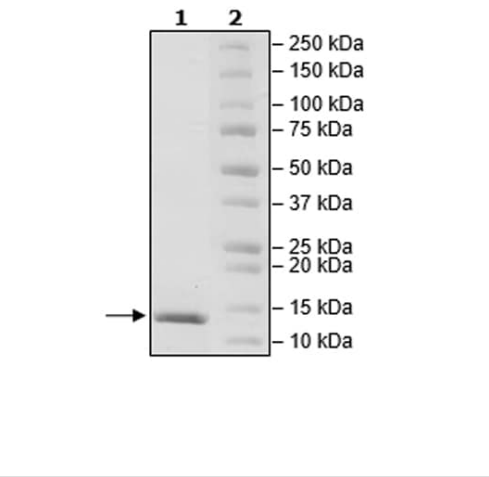
Function	Multifunctional protein that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGFB1 and have specific receptors for it. It positively and negatively regulates many other growth factors. It plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts.
Tissue specificity	Highly expressed in bone. Abundantly expressed in articular cartilage and chondrocytes and is increased in osteoarthritis (OA). Co-localizes with ASPN in chondrocytes within OA lesions of articular cartilage.
Involvement in disease	Defects in TGFB1 are the cause of Camurati-Engelmann disease (CE) [MIM:131300]; also known as progressive diaphyseal dysplasia 1 (DPD1). CE is an autosomal dominant disorder characterized by hyperostosis and sclerosis of the diaphyses of long bones. The disease typically presents in early childhood with pain, muscular weakness and waddling gait, and in some cases other features such as exophthalmos, facial paralysis, hearing difficulties and loss of vision.
Sequence similarities	Belongs to the TGF-beta family.
Post-translational modifications	Glycosylated. The precursor is cleaved into mature TGF-beta-1 and LAP, which remains non-covalently linked to mature TGF-beta-1 rendering it inactive.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



Functional Studies - Recombinant human TGF beta 1 protein (Active) (ab271757)

Specific activity of ab271757.



SDS-PAGE - Recombinant human TGF beta 1 protein (Active) (ab271757)

SDS-PAGE analysis of 2 µg ab271757.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors