

## Product datasheet

# Recombinant Human TGF beta 1 protein ab82991

[1 Image](#)

### Description

<b>Product name</b>	Recombinant Human TGF beta 1 protein
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Expression system</b>	Escherichia coli
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Amino acids</b>	279 to 390

### Specifications

Our **Abpromise guarantee** covers the use of **ab82991** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE
<b>Form</b>	Liquid

### Preparation and Storage

<b>Stability and Storage</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. pH: 4.80 Constituents: 50% Glycerol (glycerin, glycerine), 0.3% Sodium acetate trihydrate
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### General Info

<b>Function</b>	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.
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<b>Tissue specificity</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the TGF-beta family.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Secreted > extracellular space > extracellular matrix.

## Images



SDS-PAGE showing ab82991.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
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