# abcam

## Product datasheet

## Recombinant human TGF beta 1 protein (Active) ab50038

### ★★★★★ <u>1 Abreviews</u> <u>1 References</u>

#### 製品の詳細

製品名 Recombinant human TGF beta 1 protein (Active)

生理活性 The ED<sub>50</sub>, as determined by TGF beta 1's ability to inhibit the mouse IL-4-dependent proliferation

of mouse HT-2 cells, is  $\leq$  0.05 ng/ml, corresponding to a specific activity of >2 x 10<sup>7</sup> units/mg

精製度 > 98 % SDS-PAGE.

>98% HPLC analyses.

**エンドトキシン・レベル** < 1.000 Eu/μg

発現系CHO cellsアクセッション番号P01137

タンパク質長 Full length protein

Animal free No

**由来** Recombinant

生物種 Human

配列 ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW

KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK
VLALYNQHNP GASAAPCCVP QALEPLPIVY
YVGRKPKVEQ LSNMIVRSCK CSSSALDTNY
CFSSTEKNCC VRQLYIDFRK DLGWKWIHEP
KGYHANFCLG PCPYIWSLDT QYSKVLALYN
QHNPGASAAP CCVPQALEPL PIVYYVGRKP

KVEQLSNMIV RSCKCS

**予測される分子量** 25 kDa

領域 279 to 390

配列の追加情報 ab50038 is composed of two identical 112 amino acid polypeptide chains linked by a single

disulfide bond. It is the mature protein after cleavage of the signal peptide and latency-associated

peptide.

#### 特性

Our Abpromise guarantee covers the use of ab50038 in the following tested applications.

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

アプリケーション

HPLC

SDS-PAGE

**Functional Studies** 

製品の状態 Lyophilized

#### 前処理および保存

#### 保存方法および安定性 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA). Working aliquots stored with a carrier protein are stable for

at least 3 months at -20°C to -80°C..

This product is an active protein and may elicit a biological response in vivo, handle with caution.

再構成 Centrifuge the vial prior to opening. For lot GR18648 Reconstitute in 10mM Citric Acid, pH 3.0 to

0.1-1.0 mg/ml. For all other lots reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. If you have any questions regaring the reconstitution of ab50038 please contact scientific

support.

#### 関連情報

機能 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.

組織特異性 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.

**関連疾患** 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.

**配列類似性** Belongs to the TGF-beta family.

**翻訳後修飾** 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.

**細胞内局在** Secreted > extracellular space > extracellular matrix.

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

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours

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