

## Product datasheet

# Anti-TGF beta 1 antibody ab125287

1 Image

### Overview

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<b>Product name</b>	Anti-TGF beta 1 antibody
<b>Description</b>	Rabbit polyclonal to TGF beta 1
<b>Host species</b>	Rabbit
<b>Specificity</b>	Full length, inactive 44 kD TGFB1 is cleaved into mature TGFB1 (13 kD). TGFB1 also homodimerizes and heterodimerizes with TGFB2, so there is potential for multiple different band sizes in WB.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, ELISA, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment, corresponding to amino acids 177-391 of Human TGF beta 1 expressed in <i>E.coli</i> .
<b>Positive control</b>	Human placenta tissue

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Constituent: PBS Note: Contains antibody stabilizer(0.05% proclin 300,10mg/ml BSA)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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Our [Abpromise guarantee](#) covers the use of **ab125287** in the following tested applications.

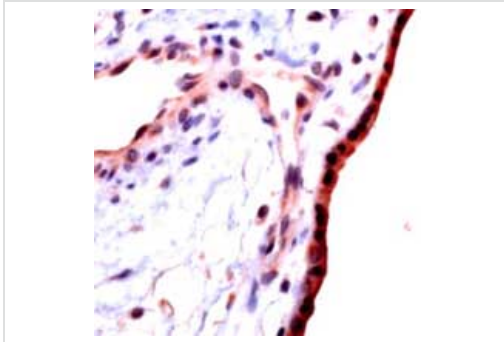
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.1 - 1 µg/ml. Detects a band of approximately 12.5, 39 kDa (predicted molecular weight: 44 kDa). Full length, inactive 44 kD TGFB1 is cleaved into mature TGFB1 (13 kD). TGFB1 also homodimerizes and heterodimerizes with TGFB2, so there is potential for multiple different band sizes in WB.
IP		Use a concentration of 2 - 5 µg/ml.
ELISA		Use a concentration of 0.01 - 0.1 µg/ml.
IHC-P		Use a concentration of 2 - 5 mg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<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.
<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



ab125287, at 1/25 dilution, staining TGF beta 1 in formalin-fixed, paraffin-embedded Human placenta tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta 1 antibody (ab125287)

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