

Product datasheet

Anti-TGF beta 1 antibody ab125287

1 Image

Overview

Product name	Anti-TGF beta 1 antibody
Description	Rabbit polyclonal to TGF beta 1
Specificity	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.
Tested applications	Suitable for: WB, IP, ELISA, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment, corresponding to amino acids 177-391 of Human TGF beta 1 expressed in <i>E.coli</i> .
Positive control	Human placenta tissue

Properties

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

Applications

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.

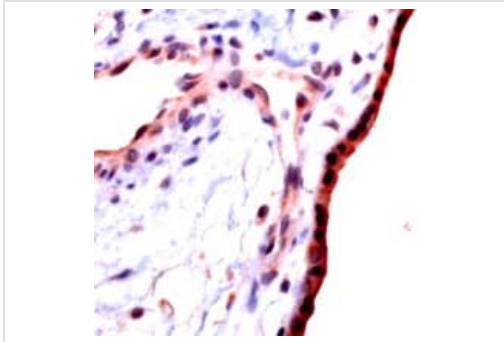
Application	Abreviews	Notes
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Application	Abreviews	Notes
WB		Use a concentration of 0.1 - 1 µg/ml. Detects a band of approximately 12.5, 39 kDa (predicted molecular weight: 44 kDa). Full length, inactive 44 kD TGFB1 is cleaved into mature TGFB1 (13 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

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



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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