

Anti-TGF beta 1 antibody ab92486

★★★★★ [15 Abreviews](#) [596 References](#) [2 Images](#)

Overview

Product name	Anti-TGF beta 1 antibody
Description	Rabbit polyclonal to TGF beta 1
Host species	Rabbit
Specificity	<p>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.</p> <p>ab92486 detects the mature secreted form of the protein at 13 kDa. Our internal testing data suggests that this does not detect the full length protein at 44kDa. As cell lysates are unsuitable for detection of the mature form, tissue lysates should be used when using this antibody.</p>
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Synthetic peptide corresponding to Human TGF beta 1. Surrounding amino acid 374.
Positive control	WB: Human spleen and kidney tissue lysates.
General notes	<p>This product is manufactured by BioVision, an Abcam company and was previously called 5559 Anti-TGF-β1 Polyclonal Antibody. 5559-100 is the same size as the 100 µg size of ab92486.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	<p>Preservative: 0.01% Thimerosal (merthiolate)</p> <p>Constituents: 0.5% BSA, 30% Glycerol (glycerin, glycerine), 0.15% EDTA, PBS</p>
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

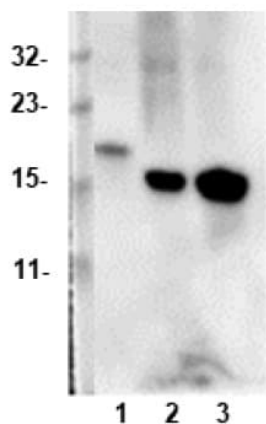
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab92486 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (4)	Use a concentration of 0.5 - 4 µg/ml. 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.

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



Western blot - Anti-TGF beta 1 antibody (ab92486)

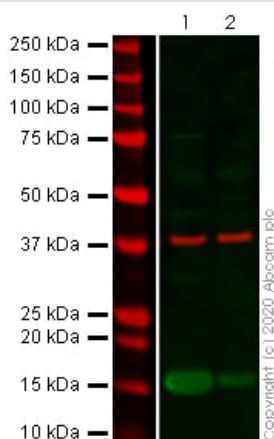
All lanes : Anti-TGF beta 1 antibody (ab92486)

Lane 1 : Human recombinant TGF- β 1 at 0.0005 μ g

Lane 2 : Human kidney tissue at 50 μ g

Lane 3 : Human spleen tissue at 50 μ g

Predicted band size: 44 kDa



Western blot - Anti-TGF beta 1 antibody (ab92486)

All lanes : Anti-TGF beta 1 antibody (ab92486) at 5 μ g/ml

Lane 1 : Human spleen tissue lysate

Lane 2 : Human kidney tissue lysate

Lysates/proteins at 20 μ g per lane.

Performed under reducing conditions.

Predicted band size: 44 kDa

Observed band size: 15 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab92486 observed at 15 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab92486 was shown to react with TGF beta 1 in western blot. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab92486 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at 5 μ g/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000

dilution for 1 hour at room temperature before imaging.

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
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

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