

Anti-TGF beta 1 antibody [EPR18163] ab179695

敲除验证
重组
RabMAb

★★★★☆
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概述

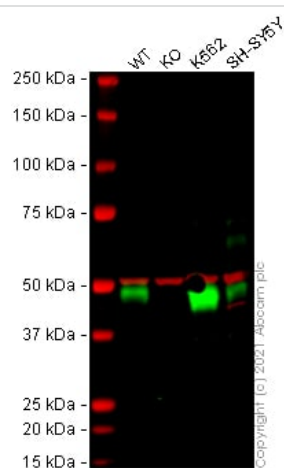
产品名称	Anti-TGF beta 1抗体[EPR18163]
描述	兔单克隆抗体[EPR18163] to TGF beta 1
宿主	Rabbit
特异性	This antibody recognizes the mature and cleaved forms of TGF-beta 1.
经测试应用	适用于: WB
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: L-929, RAW 264.7, HeLa, Wild-type A549, A549, SH-SY5Y and K562 whole cell lysates; Mouse serum; Mouse spleen lysate; Rat kidney and spleen lysates; Rat serum; Human kidney and spleen lysates; Recombinant protein fragment human TGF beta 1.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR18163

同种型	IgG							
应用	<p>The Abpromise guarantee Abpromise™承诺保证使用ab179695于以下的经测试应用</p> <p>“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。</p> <table> <tr> <th>应用</th><th>Ab评论</th><th>说明</th></tr> <tr> <td>WB</td><td>★★★★★ (3)</td><td>1/1000. Detects a band of approximately 50, 12.5 kDa (predicted molecular weight: 44 kDa).</td></tr> </table>		应用	Ab评论	说明	WB	★★★★★ (3)	1/1000. Detects a band of approximately 50, 12.5 kDa (predicted molecular weight: 44 kDa).
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WB	★★★★★ (3)	1/1000. Detects a band of approximately 50, 12.5 kDa (predicted molecular weight: 44 kDa).						
靶标								
功能	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.							
组织特异性	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.							
疾病相关	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.							
序列相似性	Belongs to the TGF-beta family.							
翻译后修饰	<p>Glycosylated.</p> <p>The precursor is cleaved into mature TGF-beta-1 and LAP, which remains non-covalently linked to mature TGF-beta-1 rendering it inactive.</p>							
细胞定位	Secreted > extracellular space > extracellular matrix.							





Western blot - Anti-TGF beta 1 antibody
[EPR18163] (ab179695)

All lanes : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/1000 dilution

Lane 1 : Wild-type A549 cell lysate

Lane 2 : TGFB1 knockout A549 cell lysate

Lane 3 : K562 cell lysate

Lane 4 : SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

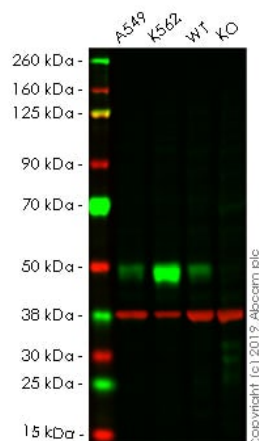
Performed under reducing conditions.

Predicted band size: 44 kDa

Observed band size: 48 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab179695 observed at 48 kDa. Red - loading control **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) observed at 55 kDa.

ab179695 was shown to react with TGF beta in wild-type A549 cells in Western blot with loss of signal observed in TGFB1 knockout cell line **ab269509** (TGFB1 knockout cell lysate **ab269671**). Wild-type A549 and TGFB1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab179695 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4 °C at a 1 in 1000 dilution 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 h at room temperature before imaging.



Western blot - Anti-TGF beta 1 antibody
[EPR18163] (ab179695)

All lanes : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/1000 dilution

Lane 1 : A549 cell lysate

Lane 2 : K562 cell lysate

Lane 3 : Wild-type HeLa cell lysate

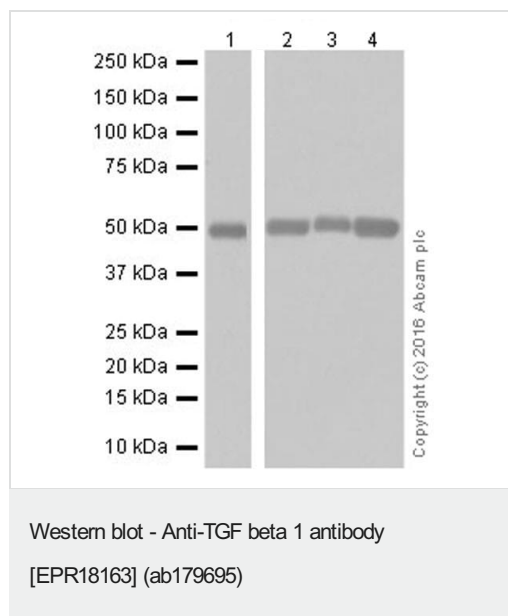
Lane 4 : TGF beta 1 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 44 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab179695 observed at 50 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab179695 was shown to react with TGF beta 1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab255439** (knockout cell lysate **ab263799**) was used. Wild-type and TGF beta 1 knockout samples were subjected to SDS-PAGE. ab179695 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/5000 dilution

Lane 1 : L-929 (Mouse connective tissue fibroblast cell line) whole cell lysate

Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 3 : A549 (Human lung carcinoma cell line) whole cell lysate

Lane 4 : K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

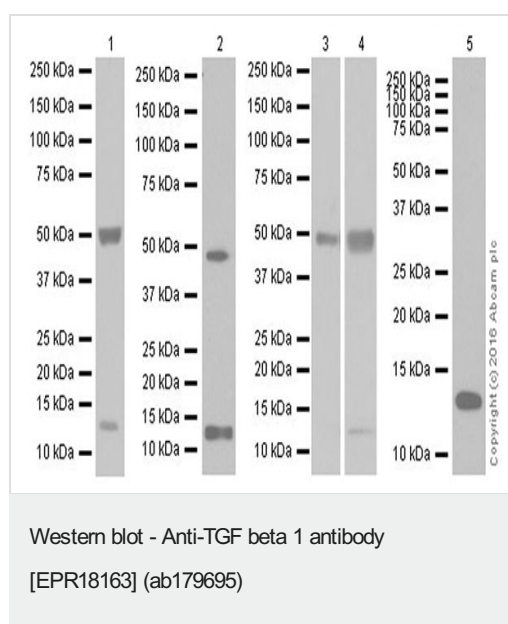
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 44 kDa

Observed band size: 50 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2-4:30 seconds.



Lane 1 : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/5000 dilution

Lanes 2-5 : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/1000 dilution

Lane 1 : Mouse serum

Lane 2 : Mouse spleen lysate

Lane 3 : Rat kidney lysate

Lane 4 : Rat spleen lysate

Lane 5 : Rat serum

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

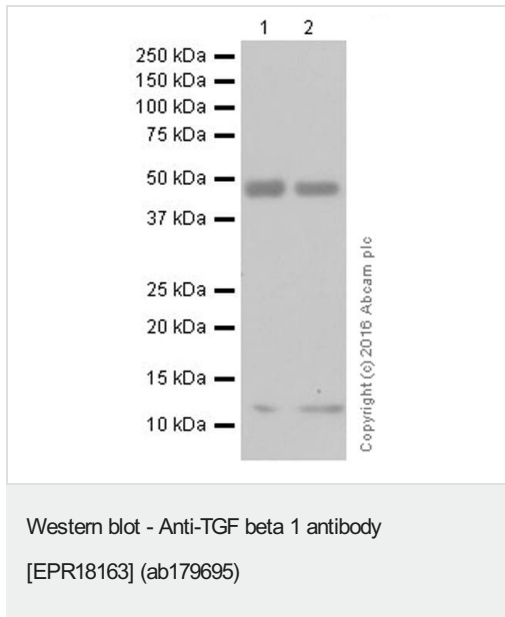
Predicted band size: 44 kDa

Observed band size: 12.5,50 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/2/3/5: 3minutes; Lane 4: 30 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID:18390240; PMID:12717387; PMID:2139036).



All lanes : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/1000 dilution

Lane 1 : Human kidney lysate

Lane 2 : Human spleen lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/100000 dilution

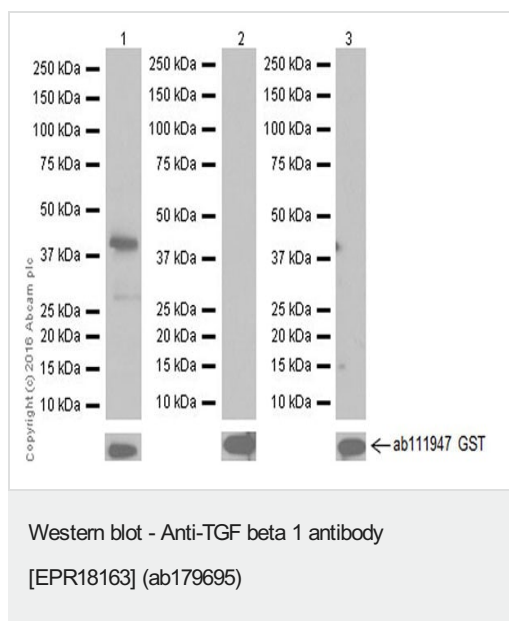
Predicted band size: 44 kDa

Observed band size: 12.5,50 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile observed is consistent with what has been described in the literature (PMID:18390240; PMID:12717387; PMID:2139036).



All lanes : Anti-TGF beta 1 antibody [EPR18163] (ab179695) at 1/1000 dilution

Lane 1 : Recombinant protein fragment human TGF beta 1

Lane 2 : Recombinant protein fragment human TGF beta 2

Lane 3 : Recombinant protein fragment human TGF beta 3

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 44 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 1 second; Lane 2/3: 3 minutes.

Recombinant protein fragment human TGF beta 1 contains aa279-390 with a GST-tag. Recombinant protein fragment human TGF beta 2 contains aa303-414 with a GST-tag Recombinant protein fragment human TGF beta 3 contains aa301-412 with a GST-tag. These three fragment recombinant proteins were made in-house.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TGF beta 1 antibody [EPR18163] (ab179695)

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