abcam

Product datasheet

Anti-TGF beta 1 antibody [TB21] ab190503

30 References 1 Image

Overview

Product name	Anti-TGF beta 1 antibody [TB21]
Description	Mouse monoclonal [TB21] to TGF beta 1
Host species	Mouse
Specificity	ab190503 recognizes both human platelet-derived and recombinant TGF beta1 in enzyme-linked immunosorbent assay (ELISA). Mouse anti-Human TGF beta antibody, clone TB21 demonstrates neutralising activity against TGF beta1 in cell proliferation assays. Mouse anti Human TGF beta antibody, clone TB21 has been demonstrated to react with dimeric (25kD) or monomeric (12.5kD) molecules of natural TGF beta1 under non-reducing and reducing conditions respectively.
Tested applications	**Suitable for:** IHC-P
Species reactivity	**Reacts with:** Human **Predicted to work with:** Horse, Guinea pig, Dog, Pig
Immunogen	Full length native protein (purified) corresponding to Human TGF beta 1 aa 250 to the C-terminus. purified from platelets. Database link: **P01137** Run BLAST with Run BLAST with
Positive control	Human breast carcinoma and brain tissues.
General notes	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. 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

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	Preservative: 0.09% Sodium azide

	Constituent: 99% PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	TB21
Myeloma	Sp2/0-Ag14
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab190503 in the following tested applications.

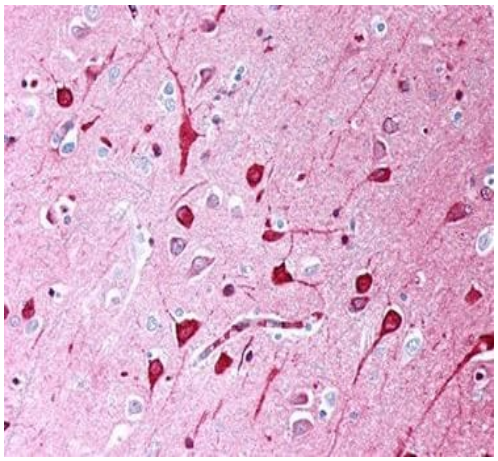
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. ab190503 has been used successfully on FFPE tissues without pretreatment. Citrate pH6.0, EDTA pH8.0 or pepsin mediated antigen retrieval have also been used.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta 1 antibody [TB21] (ab190503)

Immunohistochemical analysis of Human brain tissue labeling TGF beta with ab190503.

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