abcam

Product datasheet

Anti-TGFBI antibody [EPR12078(B)] ab170874

Recombinant RabMAb

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Overview

Product name	Anti-TGFBI antibody [EPR12078(B)]
Description	Rabbit monoclonal [EPR12078(B)] to TGFBI
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF, IHC-P **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human fetal kidney and Human fetal liver lysates, Human colon tissue and Human uterus tissue, Y79 cells
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR12078(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab170874 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	★★★★★ (1)	1/1000 - 1/5000. Predicted molecular weight: 75 kDa.
ICC/IF		1/50 - 1/100.
IHC-P	★★★★★ (2)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for IP.

Target

Function Binds to type I, II, and IV collagens. This adhesion protein may play an important role in cell-collagen interactions. In cartilage, may be involved in endochondral bone formation.

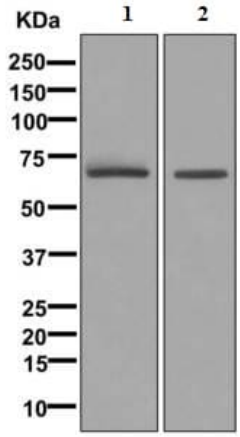
Tissue specificity Highly expressed in the corneal epithelium.

Involvement in disease Defects in TGFBI are the cause of epithelial basement membrane corneal dystrophy (EBMD) [MIM:121820]; also known as Cogan corneal dystrophy or map-dot-fingerprint type corneal dystrophy. EBMD is a bilateral anterior corneal dystrophy characterized by grayish epithelial fingerprint lines, geographic map-like lines, and dots (or microcysts) on slit-lamp examination. Pathologic studies show abnormal, redundant basement membrane and intraepithelial lacunae filled with cellular debris. Although this disorder usually is not considered to be inherited, families with autosomal dominant inheritance have been identified.
Defects in TGFBI are the cause of corneal dystrophy Groenouw type 1 (CDGG1) [MIM:121900]; also known as corneal dystrophy granular type. Inheritance is autosomal dominant. Corneal dystrophies show progressive opacification of the cornea leading to severe visual handicap.
Defects in TGFBI are the cause of corneal dystrophy lattice type 1 (CDL1) [MIM:122200]. Inheritance is autosomal dominant.
Defects in TGFBI are a cause of corneal dystrophy Thiel-Behnke type (CDTB) [MIM:602082]; also known as corneal dystrophy of Bowman layer type 2 (CDB2).
Defects in TGFBI are the cause of Reis-Buecklers corneal dystrophy (CDRB) [MIM:608470]; also known as corneal dystrophy of Bowman layer type 1 (CDB1).
Defects in TGFBI are the cause of lattice corneal dystrophy type 3A (CDL3A) [MIM:608471]. CDL3A clinically resembles to lattice corneal dystrophy type 3, but differs in that its age of onset is 70 to 90 years. It has an autosomal dominant inheritance pattern.
Defects in TGFBI are the cause of Avellino corneal dystrophy (ACD) [MIM:607541]. ACD could be considered a variant of granular dystrophy with a significant amyloidogenic tendency. Inheritance is autosomal dominant.

Sequence similarities Contains 1 EMI domain.
Contains 4 FAS1 domains.

Post-translational modifications	Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.
Cellular localization	Secreted > extracellular space > extracellular matrix. May be associated both with microfibrils and with the cell surface.

Images



Western blot - Anti-TGFBI antibody [EPR12078(B)] (ab170874)

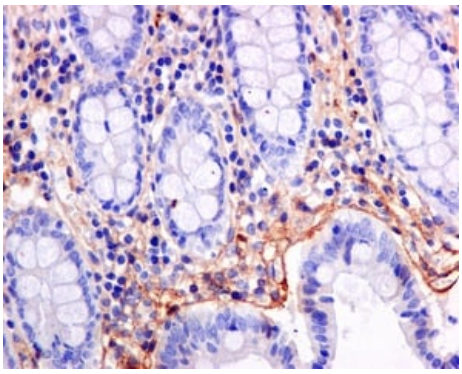
All lanes : Anti-TGFBI antibody [EPR12078(B)] (ab170874) at 1/1000 dilution

Lane 1 : Human fetal kidney lysate
Lane 2 : Human fetal liver lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labeled goat anti-rabbit IgG at 1/2000 dilution

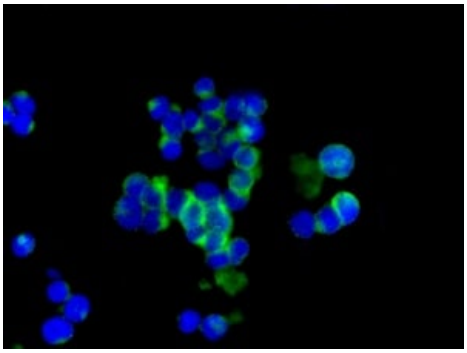
Predicted band size: 75 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGFBI antibody [EPR12078(B)] (ab170874)

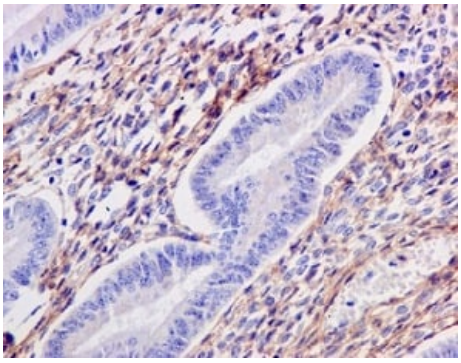
Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling TGFBI using ab170874 at a 1/100 dilution

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-TGFBI antibody [EPR12078(B)] (ab170874)

Immunofluorescent staining of Y79 cells labeling TGFBI using ab170874 at a 1/50 dilution (green) and DAPI nuclear staining (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGFBI antibody [EPR12078(B)] (ab170874)

Immunohistochemical analysis of paraffin-embedded Human uterus tissue labeling TGFBI using ab170874 at a 1/100 dilution

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Anti-TGFBI antibody [EPR12078(B)] (ab170874)

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