abcam

Product datasheet

Anti-TGFBI antibody [EPR17990-13] - BSA and Azide free ab228133

Recombinant RabMAb

3 Images

Overview

Product name	Anti-TGFBI antibody [EPR17990-13] - BSA and Azide free
Description	Rabbit monoclonal [EPR17990-13] to TGFBI - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Recombinant fragment within Mouse TGFBI aa 500 to the C-terminus. The exact sequence is proprietary. Database link: P82198
Positive control	WB: Rat eyeball and liver lysates; Mouse eyeball and spleen lysates.
General notes	Ab228133 is the carrier-free version of ab187085. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. ab228133 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* 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. Reproducibility is key to advancing scientific discovery and accelerating scientists' next

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17990-13
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab228133** in the following tested applications.

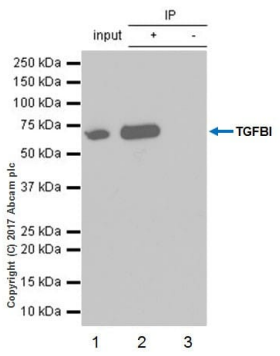
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 75 kDa).
IP		Use at an assay dependent concentration.

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



Immunoprecipitation - Anti-TGFBI antibody [EPR17990-13] - BSA and Azide free (ab228133)

TGFBI was immunoprecipitated from 0.35 mg of mouse eyeball lysate with ab187085 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab187085 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Lane 1: Mouse eyeball lysate 10 µg (Input).

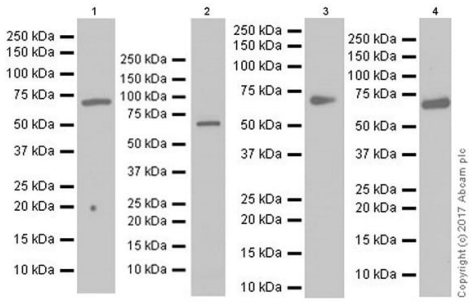
Lane 2: ab187085 IP in mouse eyeball lysate (+).

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab187085 in mouse eyeball lysate (-).

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab187085).



Western blot - Anti-TGFBI antibody [EPR17990-13] - BSA and Azide free (ab228133)

All lanes : Anti-TGFBI antibody [EPR17990-13] (ab187085) at 1/1000 dilution

Lane 1 : Rat eyeball lysate at 20 µg
Lane 2 : Mouse eyeball lysate at 20 µg
Lane 3 : Mouse spleen lysate at 10 µg
Lane 4 : Rat liver lysate at 10 µg

Secondary
Lanes 1 & 3-4 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution
Lane 2 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 75 kDa
Observed band size: 68 kDa
why is the actual band size different from the predicted?

Exposure time : Lane 1: 3 minutes; Lane 2: 1 second; Lanes 3 and 4: 3 minutes.

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 19478074).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab187085).

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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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