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. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Rat eyeball and liver lysates; Mouse eyeball and spleen lysates.
General notes	ab228133 is the carrier-free version of **ab187085**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. 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. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. 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**.

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

The Abpromise guarantee 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.

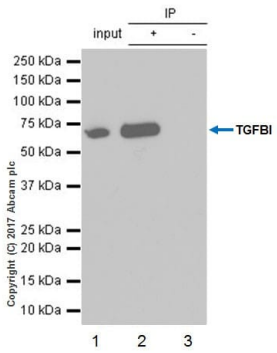
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 75 kDa).
IP		Use at an assay dependent concentration.

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).

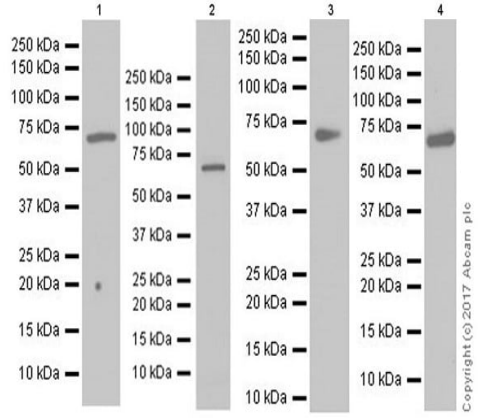
Lane 2: **ab187085** IP in mouse eyeball lysate (+).

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.

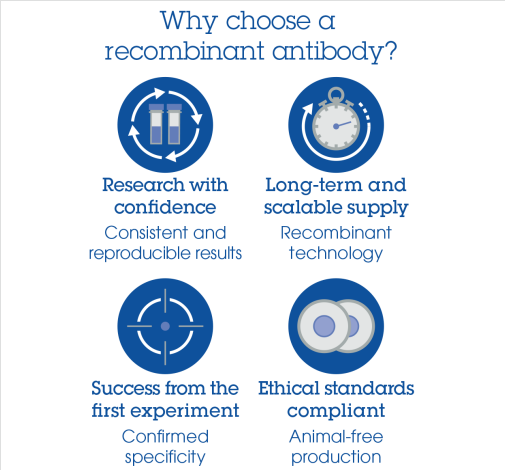
Predicted band size: 75 kDa
Observed band size: 68 kDa

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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