

Rabbit Anti-TGFBI antibody

SL7443R

Product Name:	TGFBI
Chinese Name:	角膜上皮蛋白TGFBI抗体
Alias:	AI181842; AI747162; Beta ig; Beta ig h3; Beta ig-h3; BGH3_HUMAN; Big h3; BIGH3; CDB1; CDG2; CDGG1; CSD; CSD1; CSD2; CSD3; EBMD; Kerato epithelin; Kerato-epithelin; LCD1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:200-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	72kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TGFBI:81-130/130
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes an RGD-containing protein that binds to type I, II and IV collagens. The RGD motif is found in many extracellular matrix proteins modulating cell adhesion and serves as a ligand recognition sequence for several integrins. This protein plays a role in cell-collagen interactions and may be involved in endochondrial bone formation in cartilage. The protein is induced by transforming growth factor-beta and acts to

inhibit cell adhesion. Mutations in this gene are associated with multiple types of corneal dystrophy. [provided by RefSeq, Jul 2008]

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.

Subcellular Location:

Secreted > extracellular space > extracellular matrix. May be associated both with microfibrils and with the cell surface.

Tissue Specificity:

Highly expressed in the corneal epithelium.

Post-translational modifications:

Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.

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.

Similarity:

Contains 1 EMI domain. Contains 4 FAS1 domains.

SWISS: Q15582

Gene ID: 7045

Database links:

Entrez Gene: 7045 Human

Entrez Gene: 21810 Mouse

Entrez Gene: 116487 Rat

Omim: 601692 Human

SwissProt: Q15582 Human

SwissProt: P82198 Mouse

Unigene: 369397 Human

Unigene: 14455 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

