10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TGFBR3 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22312a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q03167
Reactivity	Human, Rat
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB57596
Calculated MW	93499

Additional Information

Gene ID	7049
Other Names	Transforming growth factor beta receptor type 3, TGF-beta receptor type 3, TGFR-3, Betaglycan, Transforming growth factor beta receptor III, TGF-beta receptor type III, TGFBR3
Target/Specificity	This TGFBR3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 285-319 amino acids from the human region of human TGFBR3.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TGFBR3 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TGFBR3 (HGNC:11774)
Function	Cell surface receptor that regulates diverse cellular processes including cell proliferation, differentiation, migration, and apoptosis (PubMed:12958365, PubMed:19416857). Initiates BMP, inhibin, and TGF-beta signaling pathways

by interacting with different ligands including TGFB1, BMP2, BMP5, BMP7 or GDF5 (PubMed:18184661). Alternatively, acts as a cell surface coreceptor for BMP ligands, serving to enhance ligand binding by differentially regulating BMPR1A/ALK3 and BMPR1B/ALK6 receptor trafficking (PubMed:19726563). Promotes epithelial cell adhesion, focal adhesion formation and integrin signaling during epithelial cell spreading on fibronectin (PubMed:22562249). By interacting with the scaffolding protein beta- arrestin2/ARRB2, regulates migration or actin cytoskeleton and promotes the activation of CDC42 as well as the inhibition of NF-kappa-B (PubMed:19416857, PubMed:19325136). In gonadotrope cells, acts as an inhibin A coreceptor and regulates follicle-stimulating hormone (FSH) levels and female fertility (By similarity). Plays a role in the inhibition of directed and random cell migration in epithelial cells by altering the actin cytoskeletal organization (PubMed:19416857). Participates in epithelial-mesenchymal transformation (EMT) upon binding to BMP2 or TGFB2, by activating the PAR6/SMURF1/RHOA pathway (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Secreted {ECO:0000250|UniProtKB:P26342}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P26342}. Note=Exists both as a membrane-bound form and as soluble form in serum and in the extracellular matrix. {ECO:0000250|UniProtKB:P26342}

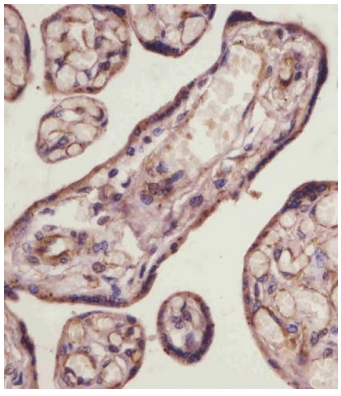
Background

Binds to TGF-beta. Could be involved in capturing and retaining TGF-beta for presentation to the signaling receptors.

References

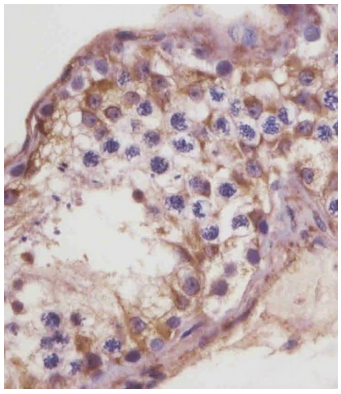
Moren A.,et al.Biochem. Biophys. Res. Commun. 189:356-362(1992).
Zippert R.,et al.J. Hum. Genet. 45:250-253(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Meng Q.-J.,et al.J. Biol. Chem. 281:37069-37080(2006).

Images

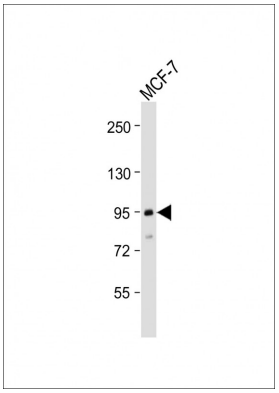


AP22312a staining TGFBR3 in human placenta tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

AP22312a staining TGFBR3 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3%



BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Anti-TGFBR3 Antibody (N-Term) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 93 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.