

# TGFBR3 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22312a

## Specification

# **TGFBR3 Antibody (N-Term) - Product Information**

| Application       | WB, IHC-P,E   |
|-------------------|---------------|
| Primary Accession | <u>Q03167</u> |
| Reactivity        | Human         |
| Host              | Rabbit        |
| Clonality         | polyclonal    |
| Isotype           | Rabbit IgG    |
| Calculated MW     | 93499         |

## **TGFBR3** Antibody (N-Term) - 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~~1:25

#### 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.

# TGFBR3 Antibody (N-Term) - Protein Information

Name TGFBR3 (<u>HGNC:11774</u>)

**Function** Cell surface receptor that regulates diverse cellular processes including cell proliferation, differentiation, migration, and apoptosis (PubMed:<u>12958365</u>, PubMed:<u>19416857</u>).



Initiates BMP, inhibin, and TGF-beta signaling pathways by interacting with different ligands including TGFB1, BMP2, BMP5, BMP7 or GDF5 (PubMed:<u>18184661</u>). 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:<u>19726563</u>). Promotes epithelial cell adhesion, focal adhesion formation and integrin signaling during epithelial cell spreading on fibronectin (PubMed:<u>22562249</u>). 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:<u>19416857</u>, PubMed:<u>19325136</u>). 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:<u>19416857</u>). Participates in epithelial cells by activating the PAR6/SMURF1/RHOA pathway (By similarity).

**Cellular Location** 

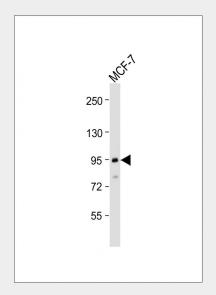
Cell membrane; Single-pass type I membrane protein. Secreted {ECO:0000250|UniProtKB:P26342}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P26342}. Note=Exists both as a membrane-bound form and as soluble form in serum and in the extracellular matrix. {ECO:0000250|UniProtKB:P26342}

## **TGFBR3 Antibody (N-Term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

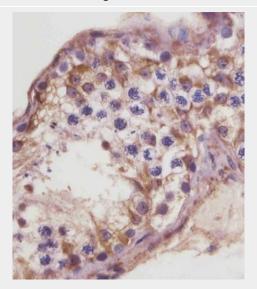
### TGFBR3 Antibody (N-Term) - Images



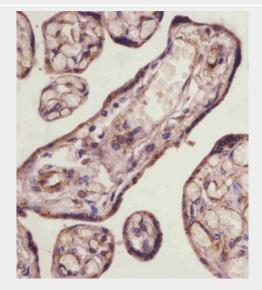
Anti-TGFBR3 Antibody (N-Term) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000



dilution. Predicted band size : 93 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.



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.

### TGFBR3 Antibody (N-Term) - Background

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

# TGFBR3 Antibody (N-Term) - 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).