

TGFBR3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2252a**Specification****TGFBR3 Antibody - Product Information**

Application	WB, FC, E
Primary Accession	Q03167
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	93.4kDa KDa

Description

This locus encodes the transforming growth factor (TGF)-beta type III receptor. The encoded receptor is a membrane proteoglycan that often functions as a co-receptor with other TGF-beta receptor superfamily members. Ectodomain shedding produces soluble TGFBR3, which may inhibit TGF-beta signaling. Decreased expression of this receptor has been observed in various cancers. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene.

Immunogen

Purified recombinant fragment of human TGFBR3 (AA: 147-328) expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

TGFBR3 Antibody - 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

Dilution

WB~~1/500 - 1/2000

FC~~1/200 - 1/400

E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TGFBR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TGFBR3 Antibody - Protein Information

Name TGFB3 ([HGNC:11774](#))

Function

Cell surface receptor that regulates diverse cellular processes including cell proliferation, differentiation, migration, and apoptosis (PubMed:[12958365](http://www.uniprot.org/citations/12958365), PubMed:[19416857](http://www.uniprot.org/citations/19416857)). Initiates BMP, inhibin, and TGF-beta signaling pathways by interacting with different ligands including TGFB1, BMP2, BMP5, BMP7 or GDF5 (PubMed:[18184661](http://www.uniprot.org/citations/18184661)). Alternatively, acts as a cell surface coreceptor for BMP ligands, serving to enhance ligand binding by differentially regulating BMPRI1/ALK3 and BMPRI1B/ALK6 receptor trafficking (PubMed:[19726563](http://www.uniprot.org/citations/19726563)). Promotes epithelial cell adhesion, focal adhesion formation and integrin signaling during epithelial cell spreading on fibronectin (PubMed:[22562249](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/19416857), PubMed:[19325136](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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}

TGFB3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

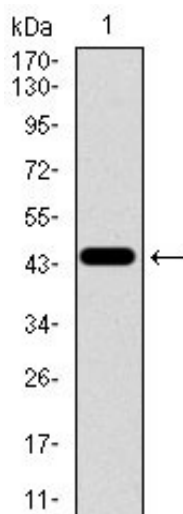
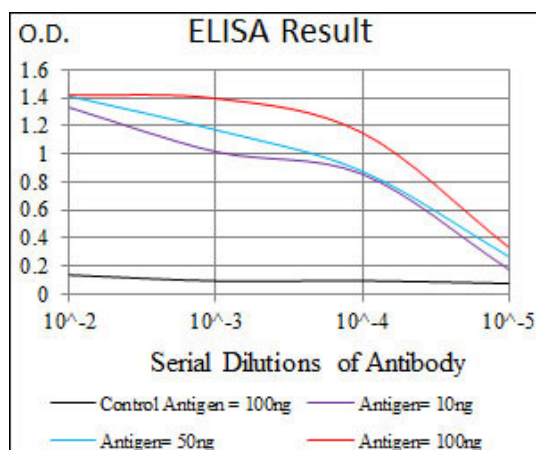


Figure 1: Western blot analysis using TGFBR3 mAb against human TGFBR3 recombinant protein. (Expected MW is 44.1 kDa)

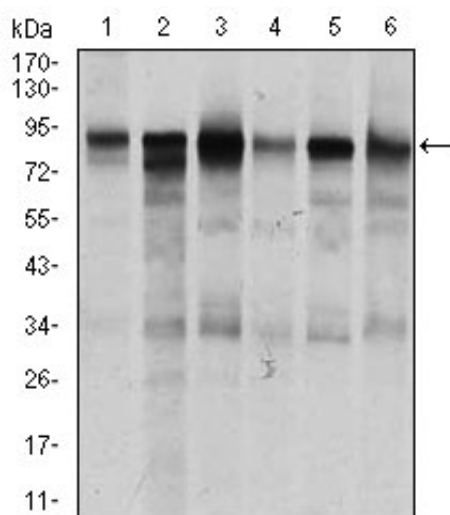


Figure 2: Western blot analysis using TGFBR3 mouse mAb against Jurkat (1), HeLa (2), MCF-7 (3), F9 (4), SK-N-SH (5), and NIH3T3 (6) cell lysate.

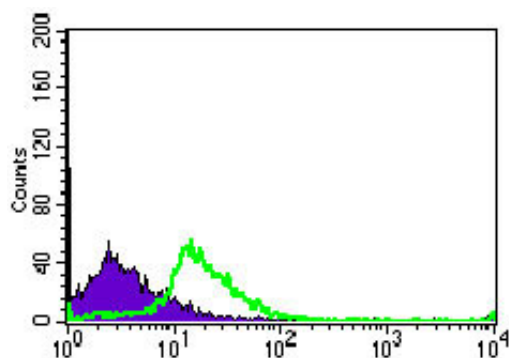


Figure 3: Flow cytometric analysis of MOLT4 cells using TGFBR3 mouse mAb (green) and negative control (purple).

TGFBR3 Antibody - References

1. Mol Biol Cell. 2011 May;22(9):1463-72.
2. Zhongguo Fei Ai Za Zhi. 2010 May;13(5):451-7.