abcam

ab78421

Anti-TGF beta Receptor III/TGFBR3 antibody [MM0057-5G9]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	MM0057-5G9
Purification technique	Affinity purification Protein G
Specificity	This antibody was selected for its ability to detect TGF beta Receptor III/TGFBR3. No cross reactivity was found to TGF beta Receptor I and Receptor II.
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	The IgG fraction of culture supernatant was purified by Protein G affinity chromatography and lyophilized from a 0.2 µm filtered solution inphosphate buffered saline (PBS).

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Target data

See full target information TGFBR3

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). (Microbial infection) May act as a receptor for human cytomegalovirus in different cell types by interacting with HCMV trimer composed of GO, GH and GL.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

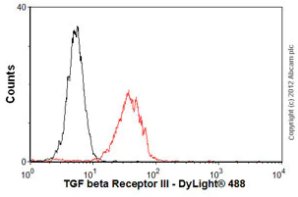
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

2 product images

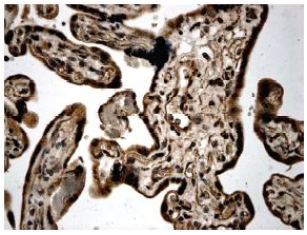


Flow Cytometry - Anti-TGF beta Receptor III/TGFBR3 antibody [MM0057-5G9] (ab78421)

TGF beta Receptor III/TGFBR3 Flow Cytometry staining using mouse Anti-TGF beta Receptor III/TGFBR3 antibody

Overlay histogram showing K562 cells stained with ab78421 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab78421, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TGF beta Receptor III/TGFBR3 antibody [MM0057-5G9] (ab78421)

TGF beta Receptor III/TGFBR3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-TGF beta Receptor III/TGFBR3 antibody

ab78421 at 1/100 dilution, staining TGF beta Receptor III/TGFBR3 in human placental tissue section by Immunohistochemistry (Formalin/PFA fixed paraffin-embedded sections).

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