abcam

ab254168

Anti-5T4 antibody [B3F1]

Recombinant

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	B3F1
Purification technique	Affinity purification Protein A
Concentration	0.881 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	1.012 mg/mL
Notes	-

WB

Not recommended

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information Tpbg

Function	May function as an inhibitor of Wnt/beta-catenin signaling by indirectly interacting with LRP6 and blocking Wnt3a-dependent LRP6 internalization.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
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

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The 5T4 protein also known as trophoblast glycoprotein or B3F1 is a cell surface antigen with a mass of approximately 72 kDa. It is encoded by the TPBG gene and expresses mainly in embryonic tissues and various cancers with limited expression in normal adult tissues. The 5T4 protein is characterized by a densely glycosylated structure contributing to its role in cellular processes like adhesion and migration.
Biological function summary	5T4 is involved in processes associated with embryonic development and cellular mobility. It contributes to the epithelial-to-mesenchymal transition (EMT) which is a critical process in both normal development and cancer metastasis. Although 5T4 is not part of a known specific complex its glycoprotein nature allows interaction with the extracellular matrix and other cell surface proteins influencing cell behavior and morphology.
Pathways	5T4 plays a part in signaling pathways involved in cell migration and invasion such as the Wnt/β-catenin pathway and TGF-β signaling. In the context of the Wnt/β-catenin pathway 5T4 interacts with proteins like β-catenin influencing cell proliferation and survival. Through its involvement in TGF-β signaling 5T4 can impact cell differentiation processes and regulatory mechanisms often linking to other proteins such as SMAD family members within these pathways.
Associated diseases and disorders	5T4 is associated with cancer particularly in its role in promoting metastasis. Its expression is notably increased in several carcinomas including breast and colorectal cancers. The elevated levels of 5T4 in tumors correlate with poorer

prognosis making it a potential target for cancer therapies. Additionally 5T4 has connections to proteins such as MMPs (matrix metalloproteinases) which facilitate tissue remodeling and metastatic spread highlighting its significance in cancer progression.

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

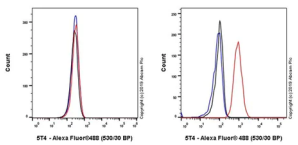
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-5T4 antibody [B3F1] (ab254168)

5T4 Flow Cytometry staining using mouse Anti-5T4 antibody

Flow cytometric analysis of RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage, Left) / NIH/3T3 (Mouse embryonic fibroblast, Right) labeling 5T4 with ab254168 at 1.012µg/ml (red) compared with Mouse monoclonal IgG Isotype Control (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) at 1/2000 dilution was used as the secondary antibody.
Negative control: RAW 264.7 (PMID: 10366710).

Gated on viable cells.

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