abcam

ab270651

PE Anti-CD57 antibody [TB01]

Anti-CD57 antibody [TB01] conjugated to PE - suitable for flow cytometry, and reacts with human samples. Clone [TB01] is a mouse monoclonal antibody cited in 8 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgM
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 8 Preservative: 0.0975% Sodium azide Constituents: Tris buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD57 protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	TB01
Purification technique	Size-exclusion chromatography
Purification notes	Purified from TCS. Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	10 µL for 10^6 Cells
Notes	or 100 µl of whole blood.

Target data

See full target information CD57

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

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

Activity summary	CD57 also known as HNK-1 is a glycoprotein with a molecular weight of approximately 110 to 150 kDa. It is a marker expressed on the surface of natural killer (NK) cells T lymphocytes and some subsets of CD8+ T cells. Besides you can find this marker in neural tissue. As a surface marker CD57 is used in human immunohistochemistry (IHC) studies to identify cell populations in immune responses and has significant utility in the characterization of lymphocyte subsets.
Biological function summary	CD57 plays a role in immune regulation and cell-mediated cytotoxicity. CD57+ cells which are often mature or post-activation states in NK cells and T lymphocytes are less proliferative but have enhanced cytotoxic abilities. These cells contribute to the immune surveillance against viral infections and tumor cells. CD57 does not belong to any well-known protein complexes but can cooperate with other surface markers to modulate immune functions.
Pathways	CD57+ cell populations participate in the immune system pathways related to cell-mediated immunity and cytotoxic response. The presence of CD57 is often associated with the downregulation of proliferative pathways and the enhancement of cytotoxic pathways. It shows functional overlap with proteins such as CD16 and NKG2D which also play roles in mediating the cytotoxic activity of NK cells.

Associated diseases and disorders	CD57 is connected to chronic infections and certain autoimmune conditions. In chronic viral infections like HIV CD57+ T cells show a state of replicative senescence where their persistent expression links to disease progression. In autoimmune disorders like rheumatoid arthritis CD57+ T cells are found in the inflamed tissues. This protein works alongside CD8 in conditions of immune dysfunction providing insights into immune status and disease activity.

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

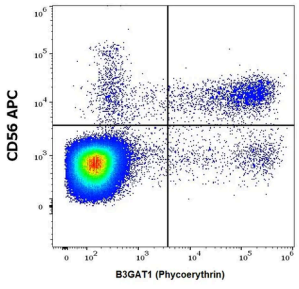
We do not recommend this combination. It is not covered by our product promise.

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.

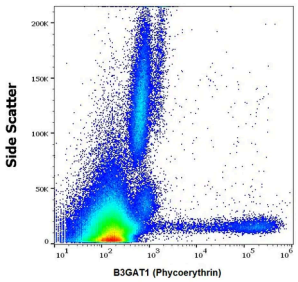
4 product images



Flow Cytometry - PE Anti-CD57 antibody [TB01] (ab270651)

CD57 Flow Cytometry staining using mouse Anti-CD57 antibody

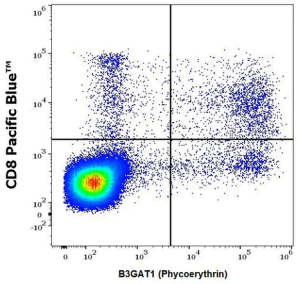
Flow cytometry analysis of human lymphocytes labeling B3GAT1 at 10 µl reagent / 100 µl of peripheral whole blood and anti-human CD56 APC antibody at 10 µl reagent / 100 µl of peripheral whole blood.



Flow Cytometry - PE Anti-CD57 antibody [TB01] (ab270651)

CD57 Flow Cytometry staining using mouse Anti-CD57 antibody

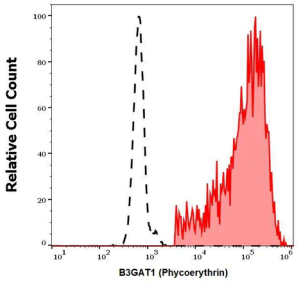
Flow cytometry analysis of human peripheral whole blood labeling B3GAT1 with ab270651 at 10 µl reagent / 100 µl of peripheral whole blood.



Flow Cytometry - PE Anti-CD57 antibody [TB01] (ab270651)

CD57 Flow Cytometry staining using mouse Anti-CD57 antibody

Flow cytometry analysis of human lymphocytes labeling B3GAT1 with ab270651 at 10 µl reagent / 100 µl of peripheral whole blood and anti-human CD8 Pacific Blue™ antibody at 4 µl reagent / 100 µl of peripheral whole blood.



Flow Cytometry - PE Anti-CD57 antibody [TB01] (ab270651)

CD57 Flow Cytometry staining using mouse Anti-CD57 antibody

Separation of human B3GAT1 positive NK cells (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab270651 at 10 µl reagent / 100 µl of peripheral whole blood.

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